

IEOM

Detroit Conference on Industrial Engineering and Operations Management

SEPTEMBER 23–25, 2016

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IEOM Society

"Achieving and Sustaining Operational Excellence"

www.ieomsociety.org

Welcome to the 2016 IEOM Detroit Conference

To All Conference Attendees:

We would like to welcome you to the **International Conference on Industrial Engineering and Operations Management (IEOM)** in Detroit, Michigan. This international conference provides a forum for academics, researchers and practitioners from many industries to exchange ideas and share recent developments in the field of Industrial Engineering and Operations Management. The theme of the conference is "Achieving and Sustaining Excellence in Quality, Reliability, Service and Operations."

The challenge of continuous improvement will be significant in the 21st century and the 2016 IEOM Detroit Conference will address the issue of continuous improvement for quality and service. Perhaps the most important example of this issue is the current financial crisis facing the world. This crisis represents extraordinary challenges; however, it also represents significant opportunities for future industrial growth and new directions. Your IEOM Society has selected the following keynote speakers to address these issues:

- Mr. Carlo Materazzo, Head of World Class Manufacturing (WCM), FCA – Global, Fiat Chrysler Automobiles (FCA)
- Dr. Helmuth Ludwig, Executive VP, Digital Enterprise Realization & Chief Manufacturing Officer, SIEMENS PLM Software, Plano, Texas, USA
- Mr. Kevin Poet, Head of Plant Operations, Siemens Charlotte Energy Hub, North Carolina, USA
- Dr. Jeffrey Abell, GM Technical Fellow, Lab Group Manager, Manufacturing Systems Research, General Motors Global Research and Development, Warren, Michigan
- Dr. Srinivas Garimella, Leader - Additive Manufacturing Center of Excellence, Eaton, Southfield, Michigan
- Mr. John Fleming, Executive VP Manufacturing & Labor Affairs (retired), Ford Motor Company
- Award Keynote: Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM, St. Louis, Missouri, USA
- Dr. Charles Mbohwa, Professor and Vice-Dean Postgraduate Studies, Research and Innovation Faculty of Engineering and the Built Environment (FEBE), University of Johannesburg, South Africa
- Richard D. Shainin, Executive Vice President, Shainin, The Red X Company, Washington, D.C., USA
- Jd Marhevko, Vice President of Quality, Lean and EHS Systems, Accuride Corporation
- Dr. Kai Yang, Professor, Dept. of Industrial and Systems Eng. and Director, Healthcare Systems Eng. Group, Wayne State University, Detroit
- Prabhu Patil, President & CEO, Prolim Corporation, Dallas/Fort Worth, Texas
- Steven Sibrel, Senior Supplier Quality Manager, Harman International, Novi, Michigan, USA and Chair - ASQ Greater Detroit

The Industry Solutions Track will address industry needs to survive in a highly competitive international environment. Distinguished practitioners will share their many years of experience in successfully addressing and solving industrial challenges. They will focus on opportunities for continuous improvement and sustainability. GD&T, Lean Six Sigma, CAE with Hypermesh, Monte Carlo Simulation & Optimization and Entrepreneurship workshops have been scheduled. The GD&T workshop has 9 industry speakers who will share their extensive knowledge and experience.

At previous IEOM Conferences, the Global Engineering Education Series has been well received by attendees; therefore, the IEOM 2016 Detroit Conference will have a dedicated session on Global Engineering Education. Several distinguished speakers will discuss the readiness of engineering graduates to meet the workforce requirements now and in the future. Featured speakers will represent various countries around the globe. They will address the challenges and opportunities of engineering education.

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

We would also like to thank all of the attendees who are participating in this event. Your Conference Planning Committee welcomes you to Detroit and wishes you an enjoyable learning experience at the conference and a memorable adventure exploring USA with its many outstanding attractions including The Henry Ford: Ford Rouge Factory, Henry Ford Museum and Greenfield Village.

Enjoy the conference and the Michigan/USA experience.

	
Ahad Ali Conference Co-Chair Lawrence Technological University, USA	Steven Sibrel Conference Co-Chair Harman International and Chair, ASQ Greater Detroit

"Achieving and Sustaining Operational Excellence"

IEOM Women in Industry and Academia Forum



Ms. Resh Plaha
Crystal Quality, UK
Chair

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
Johor, Malaysia



Dr. Rashmi Jha
Associate Professor and Program
Coordinator of Master of Computer
Applications
Gitarattan International Business
School
Guru Gobind Singh Indraprastha
University
New Delhi, India



Dr. Ilham Kissani
Faculty of Engineering &
Management Science
Al Akhawayn University
Ifrane, Morocco



Dr. Mey Goh
Associate Professor in Product
Design
Loughborough University, UK

May Othman

American University of Sharjah
United Arab Emirates (UAE)



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

Ms. Priyadarshani Premarathne

Lecturer
Department of Sociology
University of Peradeniya
Peradeniya 20400, Sri Lanka



Dr. Galia Novakova
Faculty of Mathematics and
Informatics
Sofia University
Bulgaria



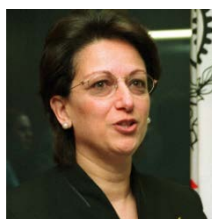
Dr. Adibah Shuib
Head of Strategic Planning
(Monitoring)
Centre for Strategic Planning
Universiti Teknologi MARA (UiTM)



Dr. Vanajah Siva
Chalmers University
Sweden



Vanessa Victoire
University of Mauritius
Mauritius



Prof. Soumaya Yacout
École Polytechnique de Montréal
Canada

Overall Conference Program

September 22, 2016 (Thursday)

2:00 pm – 7:00 pm Registration – A210 (Architecture Building)

9:00 am – 4:00 pm **Tour – The Henry Ford (Rouge Ford Factory, Henry Ford Museum and Greenfield Village)**

September 23, 2016 (Friday)

7:00 am – 5:00 pm Registration – A210 (Architecture Building)

7:00 – 8:00	Breakfast A210 (Architecture Building)
8:00 am – 5:15 pm	Workshop on “Monte Carlo Simulation & Optimization”
8:00 am – 5:15 pm	Workshop on “Geometric Dimensioning and Tolerancing (GD&T)” – Lear Auditorium, T429 - Architectur Bldg.
8:00 am – 9:15 am	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
9:15 am – 9:30 am	Networking Break at Exhibition Area – A210
9:30 am – 10:00 am	WELCOME ADDRESS - Dr. Virinder Moudgil (President of Lawrence Technological University) – A200
10:00 am – 10:45 am	OPENING KEYNOTE - Carlo Materazzo (Fiat Chrysler Automobiles) – A200
10:45 am – 11:15 am	Networking Break at Exhibition Area – A210
11:15 am – 12:00 pm	KEYNOTE: Dr. Charles Mbohwa (University of Johannesburg, South Africa) – A200
12:00 pm – 12:45 pm	KEYNOTE: Mr. Kevin Poet (Ford Motor Company) – A200
12:45 pm – 1:00 pm	Networking Break at Exhibition Area – A210
1:00 pm – 2:00 pm	LUNCH KEYNOTE: Dr. Jeffrey Abell (General Motors Company) - Lunch Provided – A200
2:00 pm – 2:30 pm	Networking Break at Exhibition Area – A210
2:30 pm – 3:45 pm	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
3:45 pm – 4:00 pm	Networking Break at Exhibition Area – 2 nd Floor of Engineering Building
4:00 pm – 5:15 pm	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
5:15 pm – 7:00 pm	Poster Display – A210
7:00 pm – 10:00 pm	Detroit River Walk (Windsor Canada International Border) and Other Sight Seeing – On Your Own

September 24, 2016 (Saturday)

7:00 am – 5:00 pm Registration – A210 (Architecture Building)

7:00 am – 8:00 am	Breakfast A210 (Architecture Building)
8:00 am – 5:15 pm	Workshop on “CAE with Hypermesh”
8:00 am – 5:15 pm	Workshop on “Lean Six Sigma Green Belt Certification”
8:00 am – 9:15 am	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
9:15 am – 9:30	Networking Break at Exhibition Area – A210
9:30 am – 10:15 pm	KEYNOTE - Aaron Rubel (AIRBUS Americas Engineering, Inc.) – A200
10:15 am – 11:00 pm	KEYNOTE - Dr. Srinivas Garimella (Eaton Corporation) – A200
11:00 am – 11:30 pm	Networking Break at Exhibition Area – A210
11:30 am – 12:45 pm	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
12:45 pm – 1:00 pm	Networking Break at Exhibition Area – A210
1:00 pm – 2:00 pm	LUNCH KEYNOTE: John Fleming , Executive VP Manufacturing & Labor Affairs (retired), Ford Motor Company – A200
2:00 pm – 2:30 pm	Networking Break at Exhibition Area – A210
2:30 pm – 3:45 pm	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
3:45 pm – 4:00 pm	Networking Break at Exhibition Area – 2 nd Floor of Engineering Building
4:00 pm – 5:15 pm	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
7:00 pm – 10:00 pm	CONFERENCE AWARD DINNER – Don Ridler Field House, Lawrence Tech Campus (Near Civic Drive) AWARD KEYNOTE: Hulas King (Siemens PLM Software)

September 25, 2016 (Sunday)

7:00 am – 1:00 pm Registration – A210 (Architecture Building)

7:00 am – 8:00	Breakfast A210 (Architecture Building)
8:00 am – 5:15	Workshop on “Lean Six Sigma Green Belt Certification”
8:00 am – 9:15	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
9:15 am – 9:30	Networking Break at Exhibition Area – A210
9:30 am – 10:15	KEYNOTE: Dr. Helmuth Ludwig (Siemens PLM Software) – A200
10:15 am – 11:00	KEYNOTE - Richard D. Shainin (Shainin, The Red X Company) – A200
11:00 am – 11:15	Networking Break at Exhibition Area – A210
11:15 am – 11:45	KEYNOTE - Jd Marhevko (Accuride Corporation) – A200
11:45 am – 12:15	KEYNOTE: Dr. Kai Yang (Wayne State University) – A200
12:15 pm – 12:45	KEYNOTE: Prabhu Patil (Prolim Corporation) – A200
12:45 pm – 1:00 pm	Networking Break at Exhibition Area – A210
1:00 pm – 2:00 pm	LUNCH KEYNOTE: Steven Sibrel (Harman International) - Lunch Provided – A200
2:00 pm – 2:30 pm	Networking Break at Exhibition Area – A210
2:00 pm – 6:00 pm	Workshop on “Entrepreneurship”
2:30 pm – 3:45 pm	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)
3:45 pm – 4:00 pm	Networking Break at Exhibition Area – 2 nd Floor of Engineering Building
4:00 pm – 5:15 pm	Parallel Sessions – 2 nd Floor of Engineering Building (E200 – E209)

Program Matrix

Friday, September 23, 2016

	Room E200	E201	E202	E203	E204	E205	T429	E207		
08:00	Global Engineering Education	Industry Solutions	Quality	Undergraduate Student Paper Competition	Doctoral Dissertation Competition	Graduate Student Paper Competition	GD&T Workshop	Monte Carlo Simulation Workshop		
Networking Break at Exhibition Hall - A210										
09:30	Welcome Address: Dr. Virinder K. Moudgil, President of Lawrence Technological University - A200									
10:00	Opening Keynote: Carlo Materazzo, Head of World Class Manufacturing (WCM), FCA – Global, Fiat Chrysler Automobiles (FCA), Auburn Hills, Michigan - A200									
10:45	Networking Break at Exhibition Hall - A210									
11:15	Keynote: Dr. Charles Mbohwa, Professor and Vice-Dean Postgraduate Studies, Research and Innovation Faculty of Engineering and Built Environment, University of Johannesburg, South Africa						GD&T Workshop	Monte Carlo Simulation Workshop		
12:00	Keynote: Mr. Kevin Poet, Plant Manager, Rawsonville Component Plant, Ford Motor Company									
12:45	Networking Break at Exhibition Hall - A210									
1:00	Lunch Keynote: Dr. Jeffrey Abell, GM Technical Fellow, Lab Group Manager, Manufacturing Systems Research, General Motors Global Research and Development, Warren, Michigan (Lunch Provided) - A200									
2:00	Networking Break at Exhibition Hall - A210									
	Room E200	E201	E202	E203	E204	E205	T429	E207	E208	E209
2:30	Global Engineering Education	Industry Solutions	Lean	Operations Research	Energy	Manufacturing and Design	GD&T Workshop	Monte Carlo Simulation Workshop	Doctoral Dissertation Competition	Graduate Student Paper Competition
3:45	Networking Break – 2 nd Floor of Engineering Building									
	Room E200	E201	E202	E203	E204	E205	T429	E207		
4:00	Global Engineering Education	Industry Solutions	Quality and Reliability	Operations Management	Design and Analysis	Construction Management	GD&T Workshop	Monte Carlo Simulation Workshop		
5:15	Poster Session - A210									

Saturday, September 24, 2016

	Room E200	E201	E202	E203	E204	E205	E206	E207
08:00	Global Engineering Education	Industry Solutions	Lean	Operations Management	Modeling and Simulation	Engineering Education	CAE with Hypermesh Workshop	Lean Six Sigma Workshop
9:30	Keynote: Aaron Rubel , Engineering Lead - Cabin & Cargo Standard Parts, Flammability Certification, & Mass Properties, Certified Lean Six Sigma Black Belt, AIRBUS Americas Engineering, Inc. - A200							
10:15	Keynote Dr. Srinivas Garimella , Leader - Additive Manufacturing Center of Excellence, Eaton Corporation – A200							
11:00	Networking Break at Exhibition Hall - A210							
11:30	Global Engineering Education	Industry Solutions	Six Sigma	Production Planning and Management	Modeling and Simulation	Industry Best Practices	CAE with Hypermesh Workshop	Lean Six Sigma Workshop
1:00	Lunch Keynote: John Fleming , Executive VP Manufacturing & Labor Affairs (retired), Ford Motor Company - A200							
2:00	Networking Break at Exhibition Hall - A210							
2:30	Global Engineering Education	Industry Solutions	Sustainable Manufacturing	Project Management	Supply Chain Management	Data Analytics	CAE with Hypermesh Workshop	Lean Six Sigma Workshop
3:45	Networking Break – 2 nd Floor of Engineering Building							
4:00	Global Engineering Education	Industry Solutions	Manufacturing and Reliability	Production Planning and Management	Inventory Management	Entrepreneurship and Innovation	CAE with Hypermesh Workshop	Lean Six Sigma Workshop
7:00 – 10:00 pm: Award and Recognition Dinner – Don Ridler Field House, LTU Campus								
Award Keynote: Hulas King , Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM Software								

Sunday, September 25, 2016

	Room E200	E201	E202	E203	E204	E205	E206	E207
08:00	Global Engineering Education	Industry Solutions	Quality and Reliability	Engineering Management	Operations Research	Case Studies	Human Factors & Ergonomics	Lean Six Sigma Workshop
Networking Break at Exhibition Hall - A210								
9:30	Keynote: Dr. Helmuth Ludwig, Executive VP, Digital Enterprise Realization & Chief Manufacturing Officer, Siemens PLM							
10:15	Keynote: Richard D. Shainin, Executive Vice President, Shainin, The Red X Company, Washington, D.C.							
11:00	Networking Break at Exhibition Hall - A210							
11:15	Keynote: Jd Marhevko, Vice President of Quality, Lean and EHS Systems, Accuride Corporation							Lean Six Sigma Workshop
11:45	Keynote: Dr. Kai Yang, Professor, Dept. of Industrial and Systems Engineering, Wayne State University, Detroit							
12:15	Keynote: Prabhu Patil, President & CEO, Prolim Corporation, Dallas/Fort Worth, Texas							
12:45	Networking Break at Exhibition Hall - A210							
1:00	Lunch Keynote Steven Sibrel, Sr. Supplier Quality Manager, Harman International and Chair – ASQ Detroit (Lunch Provided)							
2:00	Networking Break at Exhibition Hall – A210							
2:30	Global Engineering Education	Industry Solutions	e-Business & Information Technology	Sustainability and Green Systems	Healthcare Systems	Financial Engineering	Entrepreneurship workshop	Lean Six Sigma Workshop
3:45	Networking Break – 2 nd Floor of Engineering Building							
4:00	Global Engineering Education	Industry Solutions	Operations Management	Energy	Design and Analysis	OPEN	Entrepreneurship workshop	Lean Six Sigma Workshop

Keynote Speakers

9:30 am – Welcome Address



Dr. Virinder K. Moudgil
President
Lawrence Technological University
Southfield, Michigan

10:00 am – 10:50 am (Friday, September 23) – Opening Keynote



Carlo Materazzo
Head of World Class Manufacturing (WCM), FCA – Global
Fiat Chrysler Automobiles (FCA)
Auburn Hills, Michigan

Carlo Materazzo was appointed Head of World Class Manufacturing (WCM), FCA – Global, in October 2015. In this position, Materazzo will be responsible for the WCM audit process, knowledge sharing, implementation and coordination between the four regions – EMEA, APAC, LATAM and North America. This assignment is in addition to his current responsibilities for WCM expansion at the Company's 37 manufacturing facilities in North America. WCM is a methodology that focuses on eliminating waste, increasing productivity, and improving quality and safety in a systematic and organized way. WCM engages the workforce to provide and implement suggestions on how to improve their jobs and their plants.

Before coming to the U.S., Materazzo was the plant manager at Fiat's Giambattista Vico Plant in Pomigliano, Italy, which was awarded Gold status in WCM in June 2013. In his role, Materazzo was responsible for all day-to-day operations, including meeting quality standards; ensuring compliance with health, safety and environmental regulations; and achieving production targets for the Fiat Panda. Materazzo joined Iveco S.p.A. in Turin, Italy, in 1996, working in the axle plant. He has held various positions of increasing responsibility in manufacturing and has

been certified as a WCM auditor.

His work and academic background includes:

- October 2015 – current, Head of World Class Manufacturing, FCA – Global
- March 2015 – current, Head of World Class Manufacturing, FCA – North America
- 2013, Plant Manager, Giambattista Vico Plant, Pomigliano, Italy, Fiat S.p.A.
- 2009, Plant Manager, Atessa, Italy, Sevel S.p.A.
- 2007, Plant Manager, Valladolid, Spain, Iveco Espana S.L.
- 2005, Russia Project Manager and Lean Manufacturing Project Manager, Suzzara Plant, Suzzara, Italy, Iveco S.p.A.
- 2003, Change Agent – Lean Manufacturing, Turin, Italy
- 2000, Operational Unit Manager
- 1999, Field Engineer – CPE
- 1997, Integrated Group Head
- 1997, Manufacturing Engineering Specialist, Iveco Axle Plant

Materazzo earned a Master of Mechanical Engineering from La Sapienza in Rome, Italy (1996). He was born in Spoleto, Italy.

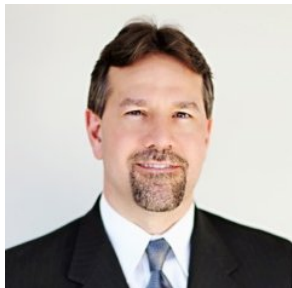


11:15 am – 12:00 pm (Friday, September 23) – Keynote
Dr. Charles Mbohwa
Professor and Vice-Dean Postgraduate Studies, Research and Innovation
Faculty of Engineering and the Built Environment (FEBE)
University of Johannesburg's (UJ)
South Africa

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.

12:00 pm – 12:45 pm (Friday, September 23) – Keynote



Kevin Poet
Head of Plant Operations
Siemens Charlotte Energy Hub
North Carolina, USA

Kevin Poet is the Head of Plant Operations for the Siemens Charlotte Energy Hub in Charlotte, NC, a position he assumed in May 2016. The Siemens Charlotte Energy Hub is the company's global location for 60Hz fossil power generation equipment manufacturing and service, with additional capabilities for the 50Hz market.

Mr. Poet is responsible for the day-to-day operations of the Charlotte facility, with a strong focus on safety, quality, on-time delivery and cost metrics. In addition, his role focuses on providing strong customer support for the factory and its three product lines: Large Gas Turbines, Steam Turbines and Generators.

Prior to his most recent position, Mr. Poet was the Plant Manager for the Rawsonville, MI Components Plant for the Ford Motor Company. For more than 26 years, Mr. Poet spent his career in roles of increasing responsibility, supporting varying divisions and product lines for the Ford Motor Company.

Mr. Poet has been a member of the Society of Automotive Engineers for more than 25 years, a Senior Member of the Institute of Industrial Engineers for 15 years, and is a Six Sigma Green Belt and Project Champion.

Mr. Poet holds a Bachelor of Science Degree in Industrial Engineering from Wayne State University and a MBA from the University of Michigan.

1:00 pm – 2:00 pm (Friday, September 23) – Lunch Keynote



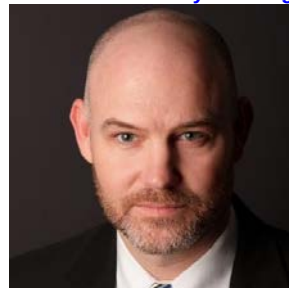
Jeffrey Abell, PhD, FSME, PE
GM Technical Fellow
Lab Group Manager
Manufacturing Systems Research
General Motors Global Research and Development
Warren, Michigan

Next Generation Quality Management Systems

Jeffrey Abell is GM technical fellow and lab group manager, Manufacturing Systems Research Lab, General Motors Global Research and Development. He is responsible for all battery manufacturing research in the company, and his team was key to bringing the Chevy Volt advanced, high-power battery to production. Abell was awarded the 2011 General Motors Boss Kettering Award for outstanding technical innovation in battery manufacturing, and the 2014 Boss Kettering Award for work related to automotive application of elastic averaging.

Previous assignments include robust synthesis and optimization; global engineering integration (GM Europe); vehicle development process engineering; robotics simulation (DaimlerChrysler); and advanced manufacturing development (Delphi Automotive Systems). He has a bachelor's degree in mechanical engineering from General Motors Institute (now Kettering University), and graduate degrees in systems engineering from Oakland University. Abell is an SME Fellow, a member of the Engineering Accreditation Commission of ABET, chair of SME's Accreditation Committee and member of SAE's ABET Committee. He has written numerous technical papers for conferences and journals. Abell is a licensed professional engineer in the state of Michigan.

9:30 am – Saturday Morning Keynote



Aaron Rubel
Engineering Lead
Cabin & Cargo Standard Parts, Flammability Certification & Mass Properties
Certified Lean Six Sigma Black Belt
AIRBUS Americas Engineering Inc.

Aaron Rubel is the engineering supervisor for functions of global Cabin & Cargo Standard Parts, Mobile, Alabama site Flammability Certification and Mass Properties teams within the engineering cabin perimeter at Airbus. He is a certified and practicing Lean Six Sigma Black Belt, and additionally serves as site intellectual property liaison.

Prior to 2009, Mr. Rubel served 20 years in the automotive industry. He was lead engineer of the 2007 Chrysler Sebring rear seat program at Faurecia Automotive Seating, contributed to body design on the Dodge Dakota and Durango vehicles at Chrysler Corporation, and spent several years gaining manufacturing experience in production and prototype facilities.

He has received awards in both the aerospace and automotive industries for driving process improvements, cost savings, innovating methods, and mentorship. Mr. Rubel has earned two patents in the automotive industry and has one currently pending within aerospace. Aaron was honored with induction into the Lawrence Technological University College of Engineering Hall of Fame.

Rubel is a master's candidate at the University of Tennessee at Chattanooga within the M.S. in Engineering Management degree program and earned his Bachelor of Science in Engineering Technology at Lawrence Tech University.

He also has made significant contributions to the community in areas of education and watershed conservation. He serves as vice-chair on the board of directors for the Bayshore Christian School in Fairhope, Alabama, and chairs the strategic planning committee of the school board. He also contributed to the development of a Mobile, Alabama, Area Education Foundation strategic plan for science, technology, engineering, and mathematics (STEM) that was published in 2015. Rubel is a former state membership committee chair in the Michigan Trout Unlimited conservation organization and has authored articles on watershed conservation and fly fishing that have been published in nationally distributed periodicals.

Married with two children, Mr. Rubel lives in the Mobile, Alabama area.

10:15 am – Saturday Morning Keynote



Dr. Srinivas Garimella

**Leader - Additive Manufacturing Center of Excellence
Eaton Corporation
Southfield, Michigan**

Srinivas Garimella directs the strategy and operation of Eaton's Additive Manufacturing Center of Excellence. He joined Eaton in September 2013 in the Manufacturing and Supply Chain team in Electrical Sector to lead initiatives in global manufacturing strategies and innovation.

Prior to Eaton, Srinivas worked for Alcoa and Deloitte Consulting. At Alcoa, he led programs to align innovation strategy to business strategy, structure robust early stage innovation processes, deliver breakthrough technologies in energy efficiency, drive collaborative new product/process development with external entities as part of Alcoa's Open Innovation initiative, and develop/deploy control and automation technologies to improve productivity and product quality in Alcoa's facilities world-wide. At Deloitte, he led a variety of engagements in manufacturing/supply chain strategy, operations transformation, inventory reduction, lean manufacturing, merger integration planning, ERP system planning, and infrastructure risk assessment.

Srinivas earned a Ph.D. in Mechanical Engineering from Ohio State and an MBA from Carnegie Mellon's Tepper School of Business. He received numerous awards for outstanding academic accomplishments.

1:00 pm, Saturday, September 24 – Lunch Keynote



Mr. John Fleming

**Executive VP Manufacturing & Labor Affairs (retired)
Ford Motor Company**

John retired from Ford Motor Company at the end of 2015 after 48 years with the Company. At the time of his retirement he was Executive Vice President of Global Manufacturing and Labor Affairs a role he held since 2008. Prior to the Manufacturing role he was the Chairman and CEO of Ford of Europe and Export Markets and Chairman of Volvo Cars. Prior to this time he spent his career in Various Manufacturing Roles Globally. Born in Liverpool England he joined Ford as an Engineering Apprentice in 1967. Mr. Fleming holds an Honorary Degree from the John Moores University in Liverpool and production engineering qualifications from North East London Polytechnic

7:00 pm – Award Keynote



Hulas King

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

Hulas is responsible for the strategy and operational leadership of Siemens PLM Software Global Diversity Council. He also leads Professional Affiliations & Global Community Relations Teams, driving innovation and digitalization value for youth, displaced workers, strategic customers and business partners. Mr. King is a decorated Vietnam veteran, a Certified Manufacturing Engineer and a Certified NC Manager. He was inducted into the African-American Biographies Hall of Fame for outstanding contributions in Business and Engineering. He represents SIEMENS on several professional boards including the Institute of Industrial Engineers, the Society of

Manufacturing Engineers, Advancing Minorities' Interest in Engineering, the Stone Soup Foundation, the Accreditation Board for Engineering & Technology (ABET), the International Federation of Engineering Education Societies (IFEES) and the Professional Business Leadership Council. He travels extensively within the Americas, Europe, the Middle East and Asia Pacific, speaking at various technical seminars in support of Global Opportunities in PLM.

Hulas managed the GO PLM (Global Opportunities in Product Lifecycle Management) program, nurturing strategic partnerships that provide significant added value for academic institutions, youth development programs and our global communities. These partnerships exemplify SIEMENS as the PLM Industry Leader and are successful in developing technology environments where underutilized citizens of the world can work together

to improve their economic conditions and promote peace. He served as McDonnell-Douglas' Program Manager for Enterprise Life-Cycle Processes for Team Columbus Engineering / Manufacturing in support of C-17 Production in Columbus, OH.

Education

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

9:30 – 10:15 am Sunday Morning Keynote



Dr. Helmuth Ludwig

**Executive Vice President - Digital Enterprise Realization and
Chief Manufacturing Officer
SIEMENS PLM Software
Plano, Texas, USA**

"The Digital Enterprise"

Dr. Helmuth Ludwig is executive vice president of Digital Enterprise Realization and chief manufacturing officer for Siemens PLM Software, a business unit of the Siemens Digital Factory Division.

Dr. Ludwig has a long history of developing and leading highly successful organizations. He began his career at Siemens in 1990, working in Corporate Development to create regional strategies. He subsequently opened and built up the first Siemens organization in Kazakhstan, serving as general manager until 1996, when he joined Siemens' Automation and Drives (A&D) group with responsibility for Process Instrumentation Systems. From 1998 until 2001 he was head of Siemens' Energy and Industry division in Buenos Aires, then from 2001 to 2002 served as division president for Software and Systems House. In 2002 he moved to A&D's Systems Engineering division as president. Dr. Ludwig served as president of Siemens PLM Software from 2007 until 2012, later taking on the role of CEO of the Industry Sector USA immediately prior to assuming his current position.

Dr. Ludwig holds a Master of Science degree in Industrial Engineering from the University of Karlsruhe, a Master of Business Administration from the University of Chicago and a PhD in Political Science from Christian-Albrechts-University in Kiel. He teaches as adjunct professor for International Corporate Strategy at SMU's Cox School of Business in Dallas.

Committed to community service, he has served as president of the Spanish-German Executive Committee of Rotary International, was the founding president of the first Rotary Club in Central Asia and a member of the Board of Trustees for the Kazakhstan Institute of Management, Economics and Strategic Research (KIMEP) among numerous other activities.

Married with two children, Dr. Ludwig lives in the Dallas area.

10:15 – 11:00 am Sunday Morning Keynote



Richard D. Shainin

**Executive Vice President
Shainin, The Red X Company
Washington, D.C., USA**

Richard is an author and lecturer. He wrote the "Multi-Vari Charts" chapter for the Encyclopedia of Statistics in Quality and Reliability (Wiley 2008). He has also published papers in Quality Engineering and Six Sigma Forum. He has been a frequent speaker at quality conferences including the ASQ World Conference. Dick was named the 2014 Quality Leader of the Year by the ASQ Automotive Division. His insights on quality, reliability and technical problem solving have been quoted by Bloomberg News, Automotive Engineering, The Detroit Free Press, The Detroit News and Automotive News. He has also been interviewed for radio and television. Prior to joining Shainin

in 1991, Dick worked at AT&T where he led high-performance teams in engineering, operations, marketing and sales. He currently guides class development and delivery, and he continues to work with client leadership to develop and implement Shainin programs. Dick has a bachelor of engineering degree from Stevens Institute of Technology (Hoboken, NJ), and an MBA from American University (Washington, D.C.). He is a graduate of the AT&T Management Development Program.

11:00 – 11:30 am Sunday Morning Keynote



Jd Marhevko
VP QLMS & EHS
Accuride Corp

Jd Marhevko is the Vice President of Quality, Lean and EHS Systems for Accuride Corporation. She is a business and operational excellence executive with over 25 years of operations, QA and lean experience in a variety of industries including Automotive, Aerospace, Plastics and Machining. Jd is an ASQ Fellow, a Certified Manager of Quality and Organizational Excellence (CMQ/OE), a Certified Quality Engineer (CQE) and a Certified Six Sigma Blackbelt (CSSBB). She is also a trained Master Black Belt (MBB). Jd has been a senior Baldrige System assessor for the state of Michigan for several years. She holds a Bachelor of Science in Engineering (BSE) from Oakland University in Michigan and a Master's of Science Administration (MSA) from Central Michigan University. Jd is a Past-Chair of ASQ's Quality Management Division (QMD), a 24,000 member global professional organization.

11:30 am – 12:00 pm Sunday Keynote



Dr. Kai Yang
Professor, Department of Industrial and Systems Engineering
Director, Healthcare Systems Engineering Group
Wayne State University, Detroit, Michigan

Biography: Dr Kai Yang is a Professor of the Industrial and Systems Engineering Department at Wayne State University. Dr. Kai Yang has been the Director of the Healthcare System Engineering Group of Wayne State University since 2009. Dr. Yang's areas of research include statistical methods in quality and reliability, healthcare system engineering, data analytics and applications, his research has been supported by NSF, the VA, Siemens, General Motors, Ford, Chrysler, and many others.. He is the author of 8 books in 4 languages, and hundreds of publications. He speaks frequently in international conferences, and research seminars, and consults for industrial corporations. Dr Yang serves important roles in American Society of Quality and Institute of Industrial and Systems

Engineering (IISE), and serves various editorial roles for many journals, especially his leadership role in two flag journals of IISE.

Dr. Yang is one of the founding proposal writers and an academic faculty advisor of VA Center of Applied Systems Engineering (VA CASE), by far the largest national engineering resource center sponsored by the US Department of Veteran Affairs whose mission is to promote the use of industrial engineering to improve healthcare systems. Dr. Yang's healthcare system engineering group works closely with VA CASE and Dr. Yang is the PI of 28 healthcare system engineering-sponsored projects. Dr Yang has been a quality engineering coach to several famous international companies, including Apple Inc and Siemens Energy. Dr. Yang obtained both his MS and PhD degrees from the University of Michigan.

12:00 – 12:30 pm: Sunday Keynote



Prabhu Patil
President & CEO
Prolim Corporation
Dallas/Fort Worth, Texas

Prabhu Patil has hands-on Technology and Management experience and proven record of developing technology solutions to address customer business problems to reduce time-to-market, cost and increase productivity. He comes with nearly two decade of diverse experience across Government, Private and Public Companies such as IBM, EDS and Siemens. As President of the company, he helps global companies to build strategies, innovative products, and set up and scale software centers / R&D centers / offshore development centers (ODC). Prabhu has been widely recognized with several awards in every company he worked for; Defense Outstanding Scientist (1994), Excellence Award (1995), Rookie of year (1997), MVP (1998), Product Manager Award (2000), EDS Achievement Award (2002), Outstanding Achievement Award (2005), Siemens Americas Consulting Award (2009). Specialties: Program Management, Product Management, Account/Contract Management, Building Offshore Centers, Overall General Management of IT Infrastructure/Software Business.

1:00 pm – Sunday Lunch Keynote



Steven Sibrel
Senior Supplier Quality Manager
Harman International, Novi, MI
Chair - ASQ Greater Detroit

Steve Sibrel is a business process improvement trainer, coach and auditor with over 35 years of experience in the business and manufacturing world. He is currently working as Senior Supplier Quality Manager at Harman International, a manufacturer of audio and infotainment systems for consumer, professional, and automotive industries, with well-known brands such as JBL, Lexicon, Crown, Infinity, Mark Levinson, Becker and Harman-Kardon. Previously he held a number of engineering and management positions in diverse industries at Applied

Materials (Semiconductor), NEC (Telecommunications) and Texas Instruments (Military). He has conducted over 200 supplier audits in North America, Europe, and Asia and is a Lead Auditor for ISO/TS16949, ISO9001, ISO13485, ISO17025, and 21CFR820. He has been the Chair for Professional Development for the ASQ Detroit section since 2008. He received the Distinguished Service Award in 2008 and the Leadership Award

in 2013 from ASQ. Current ASQ Certifications held are Six Sigma Black Belt, Quality Engineer, Quality Inspector, Quality Auditor, and Manager of Quality/ Organizational Excellence. He is an adjunct faculty member at Macomb Community College. Steve has a BSEE degree from Rose Hulman Institute of Technology and an MSEE degree from Southern Methodist University.



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DISTINGUISHED SPEAKERS – Global Engineering Education

Friday (September 23, 2016)

Session I: Global Engineering Education

Room Engineering Building E200, 8:00 – 9:15 am (Friday)

Session Chair: Dr. Srikant Raghavan, Lawrence Technological University

8:00 – 8:25 (Friday)



Ms. Tengku Shahrniza Bt Tengku Abdul Jalal

Head of Intensive English Language Programme
Multimedia University, Malaysia

Workplace English: An Analysis of Communication Needs

Tengku Shahrniza graduated from University Kebangsaan Malaysia with a Bachelor of Education (Hons) in TESL and obtained her Master of Business Administration (MBA) from Multimedia University. She possesses more than 20 years of teaching and training experiences that include teaching preschool, primary school, and secondary school students. She designs syllabus, modules and teaching materials. At the same time, she develops, creates and moderates exam questions and assessment. She taught English courses and camps for foundation, pre-diploma and diploma in colleges, matriculation centre and universities like UiTM, UTM, UPM and MMU. Tengku Shahrniza has been teaching international students from Saudi Arabia, Yemen, Oman, Sudan, Nigeria, Botswana, Kazakhstan, Iran, Iraq, Tanzania, Japan, Korea and Thailand.

She is currently the lecturer and advisor for Arabic Culture Society at Multimedia University, Melaka. Her roles in Arabic Culture Society are to examine the important role religion and culture play among the Middle Eastern and how it could shape the Arab students' and other local students of their belief systems and their lifestyles. She exposed the Arab students to the local cultures through charity events and homestay programmes. She is also a trainer training Support Staff, Executives and Head of Departments for multinational companies and government agencies.

She has been conducting corporate courses on English Language, Customer Service, Report Writing, Business Communication, Presentation Skills, Grooming, Ethics and Protocol for clients like Nestle, Bursa Kuala Lumpur, Felda, Sime Darby, Guthrie, Golden Hope Plantations, Malaysian Palm Oil Board, United Engineers Malaysia, AZRB, Kontena Nasional, Telekom, Tenaga Nasional, Royal Malaysian Police, Risda, Royal Malaysian Navy, Malaysian Handicraft Development Corporation, JTM, Ministry of Higher Education, Malaysia External Trade Development Corporation (MATRADE), Airod and Aero Precision Resources - Aviation Training Center.

She loves doing research with special interest in ESP, Technical and Business Communication, Management and Aviation. She has been the judge for state and national challenges for the well known RHB NST SPELL IT RIGHT CHALLENGE for 7 years. This nationwide spelling competition jointly organised by the New Straits Times and RHB Banking Group as a corporate social responsibility exercise. It was started in 2008 with the objectives to foster English proficiency among young Malaysians and to promote the usage of the newspaper as an educational tool. The competition has received endorsement from the Ministry of Education since 2008. She also published papers in highly reputable peer-reviewed open-access international conferences and journals listed in Scopus, ISI and Corpenicus.

8:25 – 8:50 (Friday)



Dr. Annamalai Pandian

Assistant Professor of Mechanical Engineering
Coordinator – Engineering Technology Management Program
Department of Mechanical Engineering
Science Engineering & Technology
Saginaw Valley State University
Saginaw, Michigan, USA

Dr. Annamalai Pandian is an assistant professor at Saginaw Valley State University. He earned his B.Eng. & M. Eng. Degree in Mech. Eng. from the University of Madras, Chennai, India, and M.S Degree in Mech. Eng. from Louisiana State University, Baton Rouge, LA, USA and D. Eng., Degree in Manufacturing Systems from Lawrence Technological University, Southfield, MI, USA. He has wide range of industrial experience in sheet metal stamping, robotic welding, automation, product design, project management, six sigma and lean manufacturing methods. He has very good certification knowledge on ISO 9001 standards and procedures. He taught in the University of Wisconsin-Stout for few years before moving to Saginaw Valley State University.

Dr. Pandian has worked in the Advanced Manufacturing Engineering division in Chrysler LLC, Auburn Hills, MI, USA for 13+ years. He has wealth of experience in automotive tooling design, process and manufacturing. He has taught several mechanical, design and manufacturing engineering courses including Engineering Mechanics, CAD, Jigs & Fixtures, Robotics & Machine Vision, Manufacturing Process Eng., Manufacturing Systems Design and Simulation, and Lean Manufacturing. Dr. Pandian's research interests include 3D printing, Sheet metal forming, Simulation, DOE, Robotics, ARMA and ANN. He is a member of ASQ, ASEE, IEOM, IIE, and SAE.

8:50 – 9:15 (Friday)

**Dr. Srikant Raghavan**

Associate Professor, College of Management
Lawrence Technological University
Southfield, Michigan, USA

Dr. Srikant Raghavan, currently an associate professor, has been part of the faculty in the College of Management since 1987. Before this position, Dr. Raghavan worked for General Motors as a Senior Research Engineer and Tata Consulting Services as an Associate Consultant. In addition, he has taught at half a dozen academic institutions as a part-time or full time faculty.

Dr. Raghavan holds a bachelor's in Physics from the University of Madras, a master's in Operational Research from the University of Delhi, a master's in Operations Research from Case Institute of Technology, and a doctorate in Business from the University of Houston. His research interests are primarily directed towards better teaching of the quantitative disciplines and issues in the application of Operations Management. In addition, he is interested in exploring the role and accountability of the Governance entities in business and academic institutions. Dr. Raghavan is included in the 23rd edition of "Who's Who in the Midwest", Published in Feb 1992.

He is active in a number of professional organizations like the American Production and Inventory Control Society (APICS), and the Sigma Xi Scientific Research Society. He is also a Professional Life member of the Operations Research Society of India (ORSI). He has revived local chapters of ORSI and INFORMS (The Institute for Operations Research and Management Science) in 1981 and 1985, respectively. Dr. Raghavan was naturalized as a U.S. Citizen in October 1992.

Grades, Assessment & Accreditation

Abstract: This presentation looks at the three common tools used in education in general and higher education in particular, and reflects on their purpose and the extent to which that purpose is achieved. Grades are typically used to assess the performance of individual students in a specific assignment or a course. Assessments are usually used to determine if a program of study is meeting the objectives/goals that it was designed for. Finally, accreditation is a tool to ensure Colleges, Institutes and Universities deliver quality education across all fields of study. Each of these tools is designed to assess how well academic programs are meeting their goals. As such, they play an important role in ensuring the quality of education. Because of their importance, and the dramatic changes in student demographics, challenges, and needs, advances in educational technology, and advances in knowledge itself, we must periodically examine our assessment tools to ensure they are aligned with, and are effectively promoting quality education. This presentation explores some possible improvements to our assessment tools.

Session II: Global Engineering Education

Room Engineering Building E200, 2:30 – 3:45 pm

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

2:30 – 2:55 (Friday)

**Adedeji B. Badiru, Ph.D., PE, PMP, FIIE**

Dean, Graduate School of Engineering and Management
Professor of Systems Engineering
AFIT/EN, Air Force Institute of Technology
Wright-Patterson Air Force Base, Dayton, Ohio, USA

Adedeji Badiru is SES-Equivalent Dean of the Graduate School of Engineering and Management at the Air Force Institute of Technology (AFIT) at Wright Patterson Air Force Base, Dayton, Ohio. He was previously Professor and Head of Systems Engineering at AFIT. He was also previously Professor and Head of Industrial & Information Engineering at the University of Tennessee, Knoxville. Prior to that, he was Professor of Industrial Engineering and Dean of University College at the University of Oklahoma, Norman. He is a registered professional engineer (PE), a certified Project Management Professional (PMP), a Fellow of the Institute of Industrial Engineers, and a Fellow of the Nigerian Academy of Engineering. He has BS in Industrial Engineering, MS in Mathematics, and MS in Industrial Engineering from Tennessee Technological University, and Ph.D. in Industrial Engineering from the

University of Central Florida. His areas of interest include mathematical modeling, project modeling and analysis, economic analysis, and productivity analysis and improvement. He is the author of several books and technical journal articles. He is the editor of the Handbook of Industrial & Systems Engineering.

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

EDUCATION

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

2:55 - 3:20 (Friday)



Dr. M. Abbot Maginnis

Lean Systems Program Academic Coordinator &
Director of Certificate Studies
University of Kentucky, Lexington, KY

Dr. Maginnis has more than twenty years of experience in industry and is currently an instructor in the internationally renowned Lean Systems Program at the University of Kentucky and adjunct assistant professor in the College of Engineering.

Before returning to the University of Kentucky in 2005 to pursue a master's degree in Manufacturing Systems Engineering (2007) and a Ph.D. in Mechanical Engineering (2012), Dr. Maginnis had already earned an M.S. degree in Metallurgical Engineering and Materials Science (1986) from the University of Kentucky. He spent 8 years conducting research on high temperature materials for the U.S. Bureau of Mines followed by 10 years in dental materials manufacturing prior to joining UK's Lean Systems Program. During that time he experienced a variety of quality initiatives and learned first-hand the operational and cultural challenges associated with performing systematic problem solving and creating an environment of continuous improvement. It was those experiences which led him to return to the University of Kentucky where his focus centered on the Toyota Production System.

Upon joining the Lean Systems Program in 2006, Dr. Maginnis helped redesign and continuously improve Lean Certification program, and led the development and application of the Lean Systems learning laboratory until 2014 when he was appointed the program's first academic coordinator. Along the way he earned his Ph.D. in Mechanical Engineering in 2012, focusing on the importance of standardization to team member learning and the development of sustainable continuous improvement capabilities within organizations.

Over the years, Dr. Maginnis has worked closely with other members the Lean Systems Program which includes current and retired Toyota leaders and has participated in and has led transformational and problem solving activities in a variety of industries including manufacturing, healthcare and fast food service.

Currently, the majority of Dr. Maginnis time revolves around his roles as both the Academic Coordinator for the Lean Systems Program and the Director of Certificate Studies for the Lean Graduate Certificate program within the College of Engineering. His primary activities include developing and teaching academic courses based on the lean programs' professional courses, and creating a viable learning development pathway for students interested in the Toyota Production System with the goal of providing workplace-ready students for Toyota and other companies.

3:20 - 3:45 (Friday)



Dr. Jayant Trewn, Fellow ASQ

Adjunct Faculty - A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University
Southfield, MI 48075, USA

Jayant Trewn is an Industrial Engineer specializing in Quality Systems design, development, implementation and management. Jayant has accumulated over a decade of experience working in healthcare organizations such as Beaumont Hospitals, Spectrum Health Medical Group, and service organizations such as Thomson Reuters and Lason Systems, where he built healthcare and service delivery process improvement programs based on lean, Six Sigma and PDCA concepts. He also worked for two years at Thomson Reuters working as Director of Quality Assurance, IP and Science division, managing the quality of acquisition of data for scientific research.

Jayant has been teaching quality engineering and implementing Lean Six Sigma training and certification since 1997 in his roles as Adjunct Professor at Lawrence Technological University, Wayne State University and Oakland University, all in Michigan, in addition to giving quality engineering talks, seminars and workshops at numerous national and international conferences. Jayant has also served as a Research Analyst for Wayne State University, Center for Urban Studies and Office of Strategic Planning from 1993 to 1999. Jayant has written three books, Kaizen Demystified, Practical Lean Sigma for Healthcare and Multivariate Statistical Methods in Quality Engineering and he has been published in international journals. Jayant is a Fellow of ASQ and he holds a Doctorate degree in Industrial Engineering from the College of Engineering, Wayne State University, Detroit, MI, USA. He earned his MBA in Information Systems at Wayne State University and his Bachelor of Engineering degree from Madras University, India.



Dr. Lynn Miller-Wietecha

eLearning Architect and Program Producer
Department of eLearning
Lawrence Technological University
Southfield, MI 48075, USA

Dr. Lynn Miller-Wietecha is currently Online Program Producer at Lawrence Technological University, Dearborn Heights Virtual Academy. She has extensive experience Full-time faculty member in Instructional Technology program. Taught graduate level courses in Instructional Design, Evaluation and Technology Integration.

Designing a Blended Online Lean Six Sigma Training

Abstract: One of the barriers for implementing training in globally located organizations is the high cost, increased time and complexity presented by stratified business processes that are spread geographically. Bringing teams to one "brick and mortar" training location to train using traditional classroom training techniques is not cost effective, nor practical in these complex conditions of globally spread value streams. This presentation will present a treatise on various models that the presenters have utilized for Lean Six Sigma training over a number of years. These methods span across a wide range of blended learning techniques such as asynchronous training at strategic locations, phone conference based training, online synchronous training, asynchronous online training with location based project reviews and the most effective method of asynchronous training with synchronous online project tollgate based reviews. These methods have been practiced by the presenters since 2001 and have been sequentially

improved over time to design a cost effective, efficient and proven method which has been implemented in the University and Industry settings. Blackboard and Moodle platforms have been successfully utilized. Data will be presented that shows how student engagement is achieved and trainee projects will be reviewed to show the high quality of projects implemented in this learn, practice and train method of Lean Six Sigma certification.

Session III: Global Engineering Education

Room - Engineering Building E200, 4:00 – 5:15 pm

Session Chair: **Paul Nutter**, Ohio Northern University

4:00 – 4:25 (Friday)



Srinivas Ganapathyraju, Ph.D

Professor and Coordinator

Electromechanical Engineering Technology

Sheridan College Institute of Technology & Advanced Learning

Brampton, Ontario, Canada

Dr. Srinivas Ganapathyraju is a Professor and program coordinator for the Electromechanical Engineering program at Sheridan Institute of Technology in Ontario, Canada. He has over 15 years of experience in industry and academia. He has worked as an automation design engineer in Singapore, designing pick and place manipulators used in integrated microchip testing and assembly. As an engineering intern at Jaguar Cars in Birmingham, England, he worked on an artificial neural network system to test for spot weld quality, which was part of his master's project work. He was also an industrial engineering intern at Helwig Carbon Products in Milwaukee, Wisconsin, helping to design and implement cellular manufacturing for the brush fabrication facility and ERP implementation. He was a teaching assistant at the University of Wisconsin – Milwaukee, prior to joining Sheridan. At Sheridan Institute of Technology, he was instrumental in developing two new programs. He has taught and continues to teach a number of courses including robotics, programmable logic controllers, CAD/CAM, CIM, advanced manufacturing systems, engineering economics, mechanics of materials, and engineering metrology. He has been active in applied research and awarded NSERC funding for his work.

He received his B.Tech (Honors) degree in Mechanical Engineering from the University of Zimbabwe, an MSc degree in Advanced Manufacturing Systems from the Nottingham Trent University in England and PhD in Industrial and Manufacturing Engineering with a minor in Computer Science from the University of Wisconsin - Milwaukee. His teaching and research interests are in the area industrial robotics and automation, Computer Aided Design and Manufacturing, and Machine Vision. He has presented a number of research papers at international conferences in the area of robotics and machine vision. He is registered as an Engineer in Training (EIT), while working towards his Professional Engineering (P.Eng) designation.

4:25 – 4:50 (Friday)



Dr. Rashmi Jha

Associate Professor and Program Coordinator of Master of Computer Applications

Gitarattan International Business School

Guru Gobind Singh Indraprastha University

New Delhi, India

Dr. Rashmi Jha is currently working as an Associate Professor & HOD in IT department of Gitarattan International Business School (giBS), affiliated to Guru Gobind Singh Indraprastha University) New Delhi. She is PhD, M. Phil, MCA, HSM, DCO & CWDM in Computer Science. She is a Lean Six Sigma Green Belt Certified Computer Professional. She has more than 20 years working experience in computer field; 14 years experience of teaching to MCA and B. Tech. students of GGSIPU, IGNOU, MAHE and Delhi University and 6 years experience in Computer Programming.

She has authored 31 research papers in various peer-reviewed National & International Journals and Conferences, including International Book Review. She has also presented IEEE International Paper at Tianjin University in China

on the topic "Implementing Best Practices in ERP for Small & Medium Enterprises" for IEEE Symposium of Advanced Management of Information for Globalized Enterprises (AMIGE' 08), jointly organized by IEEE, Arizona University (USA), Tsinghua & Tianjin University, UMBC, SAP & CN in September 2008. Her research interests include Natural Language Processing, Software Engineering, ERP, Lean Six Sigma, Sustainable Development of Small and Medium Enterprises Internet and E-Commerce Security etc.

She has organized and attended more than Sixty Conferences/ Seminars / Workshops/ FDPs held at National and International level on various emerging issues in "Information Technology, Management Development and Quality Improvement Programmes" for Teachers and Working Executives in Delhi. She is a Life Member of professional bodies like CSI, IEOM and KINDUZ Consulting Group India.

4:50 – 5:15 (Friday)



Paul Nutter, MBA, CMfgE, CQE, CQA
Associate Professor and Chair
Department of Technological Studies
Ohio Northern University
Ada, Ohio, USA

Manufacturing Simulation Projects for Experiential University Learning and Partnerships

Abstract: Ohio Northern University has used advanced industrial computer simulations for over 16 years to provide manufacturing technology majors with effective experiential projects. Two semesters provide a foundation in high-level CAD and manufacturing simulation applications. Students then work with local companies to create simulations of manufacturing operations to analyze ergonomic, robotic, process flow, throughput and cost reduction opportunities. Teams of students then prepare and present a PowerPoint of analysis and recommendations to company representatives. Example companies include major automotive original equipment manufacturers (OEMs) and suppliers, and a major defense-industry company. This presentation explains the curriculum, applications and

process, along with specific projects using manufacturing simulations, which have contributed to excellent industrial partnerships and student placements.

Bio: Paul Nutter is an Associate Professor and dept. chair at Ohio Northern University, teaching manufacturing technology since 2000. He has 26 years' experience in industrial and manufacturing engineering, primarily with Rockwell Automotive. Professionally Paul is active in the Society of Manufacturing Engineers as faculty advisor for SME Student Chapter S186, and is chair for the national SME Manufacturing Knowledge Base WIKI committee. He has served on many national committees, and received the 2009 national SME Award of Merit.

Saturday (September 24, 2016)

Session IV: Global Engineering Education

Room - Engineering Building E200, 8:00 – 9:15 am

Session Chair: Dr. Quazi K. Hassan, University of Calgary, Alberta, Canada

08:00 – 08:25 (Saturday)



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

Dr. Md. Mizanur Rahman is currently a Senior Lecturer at Department of Thermo-Fluids, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia UTM, Johor Bahru, Malaysia. Before joining at UTM, he has served as a Postdoctoral Researcher at Aalto University School of Engineering, Finland. Rahman also has more than 12-year working experience in a government statutory body namely Rural Electrification Board (REB), Bangladesh. During his tenure in REB, Dr. Rahman has gathered practical experience in dealing with techno-economic and sociocultural challenges faced by rural electrification programme. He has accumulated deep insights towards the solution pathways for the Global Mega-challenge of having 1.2 billion people without access to electricity yet. Mr. Rahman

has sound understanding into the global energy sector challenges and its societal implications. Mr. Rahman received his Ph.D. in Energy Economics and Power plant Engineering from Aalto University, Finland, M.Sc. in Sustainable Energy Engineering from Royal Institute of Technology KTH, Sweden, and B.Sc. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh. His research interests include rural electrification, energy economics, energy management, energy efficiency and system, sustainable and renewable energy, energy system modelling, Life-Cycle Analysis, distributed power generation, multicriteria evaluation etc. Dr. Rahman has several publications in International referred journals in energy engineering domain.

08:25 – 08:50 (Saturday)



Eui H. Park, Ph.D.
Graduate Program Coordinator
Professor, Department of Industrial and Systems Engineering
North Carolina A&T State University
Greensboro, North Carolina

Dr. Eui H. Park, Professor of the Department of Industrial and Systems Engineering (ISE) at North Carolina A&T (NC A&T) State University, received his Ph.D. from Mississippi State University in 1983. Upon completion of his Ph.D., he joined NC A&T and has since initiated and developed a successful Human-Machine Systems Engineering program and interdisciplinary manufacturing program. He has also conducted STEM outreach programs, the Para-Research Program, Partnership in Education and Research, REU, and RET, for the past sixteen years. He is the founder of teaching factory, Piedmont Triad Center for Advanced Manufacturing. Dr. Park was also the Chairperson of the ISE Department for sixteen years from July 1990. He has been an IIE Fellow since 2000. His research interest include Human-Machine Systems Engineering and Quality Assurance. He has been a principle investigator in 24 awarded funded research projects totaling over \$12 million in the past ten years.

08:50 – 09:15 (Saturday)

**Farnaz Ghazi-Nezami, PhD, CSSGB**

Assistant Professor
Industrial and Manufacturing Engineering Department
Kettering University
Flint, Michigan, USA

Farnaz Ghazi-Nezami is an Assistant Professor in the Industrial and Manufacturing Engineering Department at Kettering University. She received her Ph.D. in Industrial and Manufacturing Engineering from Wichita State University. She also earned her masters and undergraduate degree in Industrial Engineering in Iran, Tehran. Dr. Ghazi-Nezami is a Certified Six Sigma Green Belt (CSSGB) from the American Society for Quality (ASQ), and received the Energy Assessment Certification from the Department of Energy. Her research interests include applied optimization, sustainability, energy efficient manufacturing systems, supply chain and operations management, and engineering education. In educational research, her interests include online education, active learning and entrepreneurial mindset development in engineering classes.

Session V: Global Engineering Education

Room - Engineering Building E200, 11:30 am – 12:45 pm

Session Chair: Dr. Daw Alwerfalli, Lawrence Technological University, Southfield, Michigan, USA

11:30 – 11:55 (Saturday)

**Dr. Daw Alwerfalli**

Professor of Mechanical/Manufacturing Engineering
Director of Master of Engineering Management Program
College of Engineering
Lawrence Technological University
Southfield, Michigan, USA

Prominent professor, senior technical industry consultant and manufacturing engineering educator with a tremendous expertise in program and curriculum development in higher technical education. Highly experienced and dedicated community leader with great ability to work with an array of constituencies and coalitions in developing shared organizational vision to create and implement strategies aimed at advancing common causes to

accomplish goals in fulfillment of the organization's mission. Highly perceived expert and industrial advisor. He is the founder of Manufacturing Engineering Solutions (MES) a consulting firm founded in 2000. He is senior technical consultant and strategist to the US manufacturing industry. MES developed executive training programs to numerous organizations such as Chrysler, Ford, GM, Exxon Mobil, Conco Philips, Marathon and Tier I and II suppliers to the US auto industry and other international companies. Published numerous research papers in many national and international conferences.

Dr. Alwerfalli is a recipient of many prestigious awards including, the 2009 Arab American of the year in education, 1997 Lawrence Tech. Excellence in Teaching Award, 2004 Outstanding Engineering Faculty. He serves on many boards of directors, he also served on the Advisor Council of the Governor of Michigan for the Arab American and Chaldean Affairs Committee. He is currently serving on the steering committee of MAT 2 for dual education where he is a lead assessor to evaluate colleges for readiness in joining MAT 2 coalition of several German US based companies. Dr. Alwerfalli is also serving on the steering committee of "LIFT" Lightweight Innovation for Tomorrow, The committee is to develop innovative educational curriculum and skills for the next generation workforce for the Michigan, Ohio, Indiana and Tennessee under \$148 Million, a federal grant for the year 2015-2016. For several years, Dr. Alwerfalli served as the academic advisor of many doctoral students who obtained their doctorate degrees and are currently leaders in the US auto industry.

11:55 – 12:20 (Saturday)

**Dr. Devdas Shetty**

Dean, School of Engineering and Applied Sciences
Professor of Mechanical Engineering
University of the District of Columbia
Washington DC, USA

Dean Shetty joined University of the District of Columbia in 2012, having previously served as Dean of Engineering at Lawrence Technological Institute and Dean of Research at the University of Hartford.

While with the University of Hartford, Dr. Shetty was first Chair of the Vernon D. Roosa Endowed Professorship. In addition, he was the Director of the Engineering Applications Center, through which he established partnerships with more than 50 Connecticut industries. During 2008 and 2009, Dr. Shetty served as Dean of the College of Engineering for Lawrence Technological University in Michigan. During that time, he initiated several new academic programs, established partnerships and contributed to curricular innovation. Prior to coming to Hartford, Dr. Shetty held academic positions at the Albert Nerkin School of Engineering at the Cooper Union for the Advancement of Science and Art in New York City.

Dr. Shetty is the author of three books and more than 200 scientific articles and six patents. His books on Mechatronics and Product Design are widely used as a textbooks in many universities around the world. Dr. Shetty's research work has been cited for original contribution to the understanding of engineering surface measurement, for significant intellectual achievements in mechatronics and for contributions to product design. He is especially well-known for his contributions in establishing partnerships between the University and industries.

He is the recipient of academic and research grants from organizations like National Science Foundation, Society of Manufacturing Engineers, US Army, Air force etc.

Dr. Shetty had been leading research efforts in a U.S. Army research project on Unmanned Aerial Vehicles. In partnership with Albert Einstein College of Medicine in New York, he invented the patented mechatronics process for supporting patients. Dr. Shetty has chaired several international conferences and presented keynote lectures. Major honors received by Prof. Shetty include James Frances Bent award for Creativity, the Edward S. Roth National Award for Manufacturing from the Society of Manufacturing Engineers, American Society of Mechanical Engineer Faculty Award, and Society of Manufacturing Engineers Honor award. He is an elected member of the Connecticut Academy of Science and Engineering.

12:20 – 12:45:



Dr. Mohammad Miftaur Rahman Khan Khadem

Assistant Professor
Department of Mechanical and Industrial Engineering
Sultan Qaboos University
Muscat, Oman

Dr. Md .Miftaur Rahman Khan Khadem He has been working in the department of MEIE as an assistant professor of Industrial Engineering at Sultan Qaboos University of Oman. He has vast experience in ABET accreditation and curriculum development. His research area in the field of manufacturing system, OHS, ergonomics and supply chain management. He has published over thirty peer reviewed Scopus indexed Int. Journal and conference articles. He is the Executive director of IEOM society International. He served as a program chair of annual IEOM conference. Dr. Khadem has received PhD in Industrial and Manufacturing Engineering in 2004 from University of Wisconsin Milwaukee. MS in Mechanical Engineering from USA and BS in ME from BITK (KUET) 1997.

Session VI: Global Engineering Education

Room - Engineering Building E200, 2:30 – 3:45 pm

Session Chair: Dr. Srinivas R. Chakravarthy, Kettering University, Flint, Michigan, USA

2:30 – 2:55 (Saturday)



Dr. Srinivas R. Chakravarthy

Professor and Department Head
Industrial and Manufacturing Engineering
Kettering University
Flint, Michigan, USA

Dr. Chakravarthy is Professor and Head of the Department of Industrial and Manufacturing Engineering at Kettering University (formerly known as GMI Engineering & Management Institute), Flint, Michigan. He received his BS (Mathematics) and MS (Statistics) degrees from the University of Madras, India, and Ph.D (Operations Research) from the University of Delaware, Newark, USA.

Dr. Chakravarthy's research interests are in the areas of algorithmic probability, queuing, reliability, inventory, and simulation. He has published more than 100 papers in leading journals and made more than 85 presentations at national and international conferences. Recognizing the impact of Neuts' Matrix-analytic methods in stochastic

models, he initiated the organization of International Conference Series on Matrix-Analytic Methods (MAMs) in Stochastic Models. He co-organized the First International Conference on MAMs in Stochastic Models in 1995 held in Flint. Following the success of this conference and interests shown in the MAMs research community, the next seven conferences were held in Winnipeg, Canada (1998), Leuven, Belgium (2000), Adelaide, Australia (2002), Pisa, Italy (2005), Beijing, China (2008), New York, USA (2011), Calicut, India (2014). The ninth one is slated to be held in Budapest, Hungary (2016). Dr. Chakravarthy has been a visiting faculty at the Department of Statistics and Operations Research, Complutense University of Madrid, Madrid, Spain, the Department of Mathematics, Cochin University of Science and Technology, Cochin, India, and the Department of Mathematics and Statistics, Victoria University of Wellington, Wellington, New Zealand.

Dr. Chakravarthy's recognitions and awards include (a) Distinguished Faculty - 2015 (Kettering's Faculty and Alumni Honor Wall); (b) NSF Conference Award - Co PI (DMS-1360865), 2014-2015; (c) Rodes Professor, Kettering University, 2010-2012; (d) Kettering University Distinguished Research Award, 2003; (e) Kettering University/GMI Alumni Outstanding Teaching Award, 2001; (f) Sloan Grant for developing ALN courses at Kettering University, 2000; (g) GMI Outstanding Research Award, 1996; (h) Sloan Faculty/Industry Exchange Fellowship, 1996; (i) GMI Research Initiation/Improvement Grant, 1995; (j) NSF Conference award (DMI-9424312), 1995; (k) NSF Research award (DDM-9313283), 1993-1997; (l) GMI Alumni Outstanding Teaching Award, 1990; GMI Research Initiation/Improvement Grant, 1990; (m) Lilly Faculty/Industry Exchange Fellowship, 1988. Dr. Chakravarthy has significant industrial experience by consulting with GM, FORD, PCE, and UPS. He has also served as Engineering Group Manager for Operations Research Division in General Motors in 2000/2001.

Dr. Chakravarthy's professional activities include serving as (a) Area Editor for the journal, Simulation Modelling Theory and Practice; (b) Associate Editor for the journal IAPQR TRANSACTIONS - Indian Association for Productivity, Quality & Reliability; (c) Advisory Board Member for several other journals and International Conferences; (d) Reviewer for many professional journals; and (e) External Examiner for a doctoral thesis from abroad.

2:55 – 3:20 (Saturday)

**Robert P. Van Til, Ph.D.**

Pawley Professor of Lean Studies and Chair
Industrial and Systems Engineering Department
Oakland University
Rochester, Michigan, USA

Integrating Product Lifecycle Management into an ISE Educational Program

Abstract: The presentation will follow the evolution of the Oakland University Industrial and Systems Engineering Department's integration of Product Lifecycle Management (PLM) concepts and tools into its educational programs in ISE and Engineering Management. The process began with the integration of PLM tools into several existing ISE courses and the creation of a keystone course which presents PLM as a business concept. The next step involved offering application focused courses where students learn how to use a particular PLM tool while applying the tool on several projects. Application focused courses developed and offered to-date include topics such as product data management, robotics, ergonomics, change management, and integrated materials management.

Biography: Robert Van Til is the Pawley Professor of Lean Studies and Chair of Oakland University's Industrial and Systems Engineering Department. He earned a B.S. in Mechanical Engineering from Michigan State University as well as M.S. and Ph.D. degrees in Mechanical Engineering from Northwestern University. Dr. Van Til is also associated with Oakland University's Pawley Lean Institute. Dr. Van Til's educational and research interests focus on the modeling, analysis and control of manufacturing systems, lean and Product Lifecycle Management (PLM). His projects have been supported by the National Science Foundation and the Michigan Economic Development Corp. as well as by companies such as Fiat Chrysler Automobiles, Ford Motor Co., Siemens PLM Inc. and the Crittenton Hospital Medical Center. He has served in visiting positions at universities in Hawaii, the Netherlands and Australia.

3:20 – 3:45 (Saturday)

**Dr. Leslie Monplaisir**

Department Chair
Industrial and Systems Engineering
Wayne State University
Detroit, Michigan

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

Monplaisir joined the College of Engineering at Wayne State University in the Department of Industrial and Manufacturing Engineering in 1996 from Florida A & M University where he was a visiting assistant professor. He earned his PhD in Engineering Management from the Missouri University of Science and Technology (MUST), a master's in Computer Integrated Manufacturing from the University of Birmingham in Great Britain, and bachelor's in Mechanical Engineering from the University of the West Indies in Trinidad.

Session VII: Global Engineering Education

Saturday, 4:00 – 5:15 pm

Room - Engineering Building E200

**Dr. Matthew Ohland**

Professor, School of Engineering Education
Purdue University
West Lafayette, Indiana, USA

CATME SMARTER Teamwork

Dr. Ohland is a Professor of Engineering Education at Purdue University. Along with his collaborators, he has been recognized for his work on longitudinal studies of engineering students with the William Elgin Wickenden Award for the best paper published in the Journal of Engineering Education in 2008 and 2011, the best paper in IEEE Transactions on Education in 2011 and other awards. The CATME Team Tools developed under Dr. Ohland's leadership and related research have been used by more than 550,000 students of over 10,500 faculty at more than 1600 institutions in 72 countries, and were recognized with the 2009 Premier Award for Excellence in Engineering Education Courseware and other awards. He is a Fellow of ASEE and IEEE and has received teaching awards at Clemson and Purdue. Dr. Ohland is an ABET Program Evaluator, an Associate Editor of IEEE Transactions on Education, and Past Chair of the IEEE Curriculum and Pedagogy Committee. He was the 2002–2006 President of Tau Beta Pi and has been a Facilitator for Tau Beta Pi's award-winning Engineering Futures program since 1996 and has delivered 116 seminars to 2409 students around the country.

Sunday (September 25, 2016)

Session VIII: Global Engineering Education

Room - Engineering Building E200, 8:00 – 9:15 am

Session Chair: Dr. Mukti M. Rana, Delaware State University, Dover, DE, USA

8:00 - 8:25 (Sunday)



Dr. Mukti M. Rana

Associate Professor and Chair
Department of Physics and Engineering &
Optical Science Center for Applied Research
Delaware State University
Dover, DE, USA

Dr. Mukti Rana is an associate professor and chair of the Department of Physics and Engineering and Optical Science Center for Applied Research (OSCAR) at Delaware State University (DSU). Dr. Rana received his B.Sc. in Electrical and Electronics Engineering from the Khulna University of Engineering and Technology, Bangladesh (1992-1997), and his M.S. (2000-2002) and Ph.D. (2003-2007) from The University of Texas at Arlington (UTA) in Electrical Engineering. He also worked as graduate teaching assistant, graduate research assistant and post-doctoral research associate (2007-2008) in the Department of Electrical Engineering during his tenure at UTA. In fall 2008, Dr. Rana joined as an Assistant Professor in the Department of Electrical and Computer Engineering at The University of South Alabama, Mobile. In 2010, he joined in the Department of Physics and Engineering and OSCAR of DSU. Dr. Rana is the principal investigator of two centers at DSU – Center for Research and Education on Optical Sciences and Applications funded by the National Science Foundation, and Optics for Space Technology and Applied Research Center funded by the National Aeronautics and Space Administration. Dr. Rana's research projects are also supported by the Department of Defense and National Institute of Health. His current research interest includes thin film's properties for microsensors' applications, uncooled infrared detectors and microelectro-mechanical (MEMS) devices. Dr. Rana has published more than 24 refereed journal articles and conference proceedings. Dr. Rana is a member of the IEEE and the founding student advisor of IEEE student branch at Delaware State University. Dr. Rana is the recipient of excellence in research award in 2016, vice president's award for excellence in research in 2015 and excellence in outreach award 2015 for the college of mathematics, natural sciences and technology of DSU.

8:25 - 9:15 (Sunday)



Dr. Harun Rashid

Director of Staff Mentoring and Coaching
Hamadeh Educational Services serving Star International Academy, Universal Learning Academy,
Universal Academy, and Noor International Academy
&
Adjunct Faculty, College of Education
Wayne State University

Dr. Harun Rashid is the Director of Staff Mentoring and Coaching, Hamadeh Educational Services, Dearborn Heights, MI (Serving Star International, Universal, Universal Learning, and Noor International Academies) since 2011. He was Principal of Frontier International Academy (Grades 6-12) from 2005-2011. Dr. Rashid was an Assistant Principal & Principal, The Dearborn Academy (Grades K-8) from 1997-2005. He was an Assistant Director, MAT Program, Marygrove College, 1995-1997. Dr. Rashid was Principal, Darul Arqam Islamic School, Detroit, 1993-1995 and Educational Assistant, Huda School, 1989-1993. He is an adjunct faculty at WSU College

of Education since 1994 and Wayne County Community College since 1995. He was a lecturer in Philosophy, Dhaka & Chittagong University, Bangladesh 1978-1983.

Dr. Rashid has published numerous conference and journal papers. He has served in dissertation committees. Dr. Rashid has served as a panel member for many educational related services. He has offered lecture/ professional development training for educators at many private and public educational institutions nationally international including Wayne County Community College, Detroit Public Schools (Davison Elementary, Katherine B. White Elementary School, Cleveland Middle School, Northern High School), Hamtramck Public Schools, Caniff Liberty Academy, Crescent Academy International, Huda School, IAGD Weekend School, Al-Ikhlās Training Academy, Tawheed Center School, Al-Ihsan Academy, Muslim American Youth Academy, Genesee Academy (Flint), American Muslim Diversity Association (AMDA), ICA (Franklin), MDE Social Studies Conference (at WSU Nov. 1988), Michigan Institute of Professional Psychology in Farmington Hills and Michigan Public School Academies (MAPSA). He facilitates in-service professional development training on evaluating and mentoring teachers, Principals, Deans, Instructional Coaches, Department Heads, Curriculum Coordinators, Program Directors, Teacher Mentors, and other professionals at all levels of teaching and learning. Dr. Rashid also provides customized workshops for educators on effective planning and preparation for instruction, highly effective differentiated instructional strategies, and checking for understanding through authentic formative and summative assessment.

Dr. Rashid is a professional member of American Philosophical Association, Philosophy of Education Society, Association of Supervision and Curriculum Development, National Association of Secondary School Principals and Phi Delta Kappan.

Session IX: Global Engineering Education

Room - Engineering Building E200, 2:30 – 3:45 pm

Session Chair: Dr. Mohammad Rahman, Central Connecticut State University

2:30 – 2:55 (Sunday)

**Dr. Jamal Bari**

Associate Professor
Coordinator of Electronic Engineering Technology
School of Engineering Technology
Eastern Michigan University
Ypsilanti, Michigan

Dr. Bari is a faculty member at Eastern Michigan University, presently implementing and coordinating the undergraduate program in Electronic Engineering Technology. In the fall of 1997 he defended his dissertation and earned his Ph.D. in electrical engineering from the University of Arkansas. The problem he chose for his research is the control of a stochastic, nonlinear and uncertain model using adaptive control systems, including a modified extended Kalman filter and neural networks. One of the results from his dissertation was published in the Proceedings of the IEEE Conference on Decision and Control in December 1997. Dr. Bari has eight years of teaching experience and several years of industrial experience as an electrical engineer. He has taught a broad range of electronics courses and is experienced in curriculum development. He also directed, and successfully completed, a project funded by NSF for establishing an Instrumentation and Calibration lab.

2:55 – 3:20 (Sunday)

**Dr. Jacqueline Chestnut**

Adjunct Professor
Industrial and Systems Engineering Department
North Carolina A&T State University
Greensboro, NC, USA

Jacqueline Chestnut is an Adjunct Instructor for the Industrial & Systems Engineering in the College of Engineering at North Carolina Agricultural and Technical State University. She earned a Bachelor of Science and Master of Science in Industrial Engineering from North Carolina A&T State University, College of Engineering, Greensboro, North Carolina. Dr. Chestnut received a Ph.D. in Industrial Engineering from Mississippi State University in Starkville, Mississippi. She has published journal and conference papers. Dr. Chestnut has done research projects with General Motors, Jones International University, Lawrence Technological University and North Carolina A&T State University. Her research interests include human error, simulation, engineering and online education, human factors and ergonomics. She is a member of IEOM, ASEE, CUR, ASQ and Sloan.

3:20 – 3:45 (Sunday)

**Dr. Mohammad Rahman**

Assistant Professor
Manufacturing and Construction Management Department
Central Connecticut State University

Dr. Mohammad Rahman is an assistant professor in the Manufacturing and Construction Management Department at the Central Connecticut State University. His PhD is in Engineering Science, concentration in supply chain management. His Master degrees are in (i) Industrial & Production engineering, (ii) Industrial Manufacturing & Systems Engineering, (iii) Applied Statistics, and B.S. degree is in Mechanical Engineering. He served as an Assistant Professor and post-doctoral research associate at the University of Southern Mississippi and Louisiana State University, respectively. His research and teaching focused on supply chain strategy, decision making under uncertainty, and lean six sigma processes for quality. His research articles, appeared in academic journals, contributed to stochastic supply chain modeling, time series forecasting, emergency inventory management, and business decision under uncertainty. He also published several book chapters and presented topics in national and international conferences and forums.

Rahman served as PI and Co-PI in several research projects sponsored by US Department of Transportation (USDOT) and Mississippi Department of Education (MDE). He is an executive member of Industrial Engineering & Operations Management (IEOM) international forum and IEEE Xplore correspondent chair for IEOM chapter. He also served committees as a professional member with various responsibilities for Industrial & Systems Engineering Research Conference (ISERC), Decision Science Information (DSI) and Lean Six Sigma conferences. He regularly serves as a reviewer for referred journals.

Session X: Global Engineering Education

Room - Engineering Building E200, 4:00 – 5:15 pm

Session Chair: Dr. Zakaria Mahmud, Lake Superior State University, Sault Sainte Marie, Michigan

4:00 – 4:25 (Sunday)

Quamrul Mazumder, Ph.D., P.E.

Associate Chair and Associate Professor
Department of Mechanical Engineering
University of Michigan – Flint

Dr. Quamrul Mazumder is currently an associate professor of mechanical engineering at University of Michigan-Flint. His areas of research include computational fluid dynamics, multiphase flow, quality in higher education, metacognition, motivation, and engagement of students. He is a Fulbright scholar travelled around the world to promote quality and globalization of higher education.



4:25 – 4:50 (Sunday)

Dr. Walton Hancock

Professor Emeritus Industrial and Operations Engineering and
Professor Emeritus of Health Services, Management and Policy
University of Michigan, Ann Arbor, MI, USA

Questionnaires can help create high-quality, productive workforces

Walton M. Hancock is professor emeritus of industrial and operations engineering and professor emeritus of health services, management and policy in the School of Public Health at the University of Michigan. He received his bachelor's, master's and doctoral degrees in engineering from Johns Hopkins University. Prior to joining the Michigan faculty in 1960, he was manager of industrial engineering and manager of quality control at the Lord Baltimore Press in Baltimore.



4:50 – 5:15 (Sunday)

Dr. Zakaria Mahmud

Associate Professor, Mechanical Engineering
Lake Superior State University
Sault Sainte Marie, Michigan

Dr. Zakaria Mahmud is an associate professor of mechanical engineering at Lake Superior State University (LSSU), Sault Ste. Marie, Michigan. Prior to joining at LSSU, Dr. Mahmud taught at North Dakota State University, Georgia Southern University, and Texas A&M University. He received his bachelors from Bangladesh University of Engineering and Technology (Bangladesh), masters from the Royal Institute of Technology (Sweden), and doctoral from the University of Alabama (Alabama). His background is in experimental fluid mechanics with specialization in aerodynamic flow control.

SPONSORS



The International Federation of Engineering Education Societies (IFEES)

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

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



Global Engineering Deans Council (GEDC)

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

"best" practices necessary to become innovative leaders of engineering education

The GEDC holds annual meetings surrounding four strategic objectives: Institutional Leadership, Curriculum Leadership, Policy Leadership and Accreditation Leadership. Accommodating for its diverse membership, the GEDC has met in Argentina, Brazil, Turkey, France, and the United Arab Emirates, and will meet in Saudi Arabia and China in 2016.

Uriel R. Cukierman, President, International Federation of Engineering Education Societies

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



www.aeeonline.org

AFRICAN ENGINEERING EDUCATION ASSOCIATION (AEEA)

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

Some of the objectives of the AEEA are to:

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

AEEA's Activities

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

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

4th ARCEE in 2008 at Dar es Salaam, Tanzania

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

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

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

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

Prof. Funso Falade, President, AEEA

TECHNICAL PROGRAM

September 23, 2016 (Friday)

Session: 8:00 – 9:15 am

08:00 – 09:15, Friday
Global Engineering Education I
Room Eng. E200

Session Chair: Dr. Srikant Raghavan, Lawrence Technological University

08:00 – 08:25:

Ms. Tengku Shahrniza Bt Tengku Abdul Jalal

 Head of Intensive English Language Programme
Multimedia University, Malaysia

ID 365: Workplace English: An Analysis of Communication Needs

08:25 – 08:50:

Dr. Annamalai Pandian

 Assistant Professor of Mechanical Engineering
Coordinator – Engineering Technology Management Program
Department of Mechanical Engineering
Science Engineering & Technology
Saginaw Valley State University
Saginaw, Michigan, USA

An overview of International Students in the USA [ID 367]

08:50 – 09:15:

Dr. Srikant Raghavan

 Associate Professor, College of Management
Lawrence Technological University
Southfield, Michigan, USA

Grades, Assessment & Accreditation
08:00 – 09:15, Friday
Industry Solutions I
Room Eng. E201

Session Chair: Joe LaRussa, Brose Group, Auburn Hills, Michigan

08:00 – 09:15:

Joseph J. LaRussa, PE

 Industrial Engineering Manager - Drives
Brose North America Inc.
Auburn Hills, Michigan

08:25 – 08:50:

Paul Ryznar

 Founder, President and CEO
OPS Solutions
Novi, Michigan

08:50 – 09:15:

Ahmad Rashed

 Faculty of Engineering and Faculty of Graduated studies
An Najah National University, Nablus, Palestine

Palestinian construction sector
08:00 – 09:30, FRIDAY
Quality
Room Eng. E202

Session Chair: Abdul Talib BonUniversiti Tun Hussein Onn Malaysia

ID 130 Implementation of a Statistical Process Control System for a Selected Industrial Plant

Hassan Hijry and Abdulhadi Altherwi, Lawrence Technological University, Southfield, Michigan, United States

ID 212 Application of statistical process control chart for monitoring electric power losses through transmission and distribution system: a case study

Imad Alsyouf, Mohammad Shamsuzzaman and Eman Jasim, University of Sharjah, Sharjah, United Arab Emirates

ID 282 Multi-objective economic-statistical design of new t-Chart based on Process Capability Index

Mohammadsadegh Mobin, Western New England University, Springfield, MA, United States
 Samrad Jafarian-Namin and Hamid Hasanzadeh, Yazd University, Yazd, Iran

ID 216 Analysis of Accuracy Multivariate Control Chart T2Hotelling Free Distribution with Outlier Removal

Yuyun Hidayat, Titi Purwandari, and Alvionita, Department of Statistics, Padjadjaran University, Bandung, Indonesia
 Sukono and Sudradjat Supian, Department of Mathematics, Padjadjaran University, Bandung, Indonesia
 Abdul Talib Bon, Department of Production and Operations, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Malaysia

ID 343 Design of a mechanical cleaning device P.I.G (pipeline intervention gadget) connecting two transfer lines in Zimbabwe

Tawanda Mushiri, Department of Mechanical Engineering, University of Johannesburg, Johannesburg, South Africa
 Stephen Ndlovu, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
 Charles Mbohwa, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

08:00 – 09:15, FRIDAY**Undergraduate Student Presentation Competition****Room Eng. E203**

Session Chair: Dr. Abbas Mahmoudabadi, Mehrastan University, Gilan, Iran

ID 49 Growth of Food Tech: A Comparative Study of Aggregator Food Delivery Services in India

Mohan Khond, Mustafa Abbas, Harsh Balihallimath and Nishant Bidichandani, College of Engineering Pune, Pune, Maharashtra, India

ID 369 Plasma Engineered Anti-Oxidant Surfaces as Novel Food Packaging Material

Dominic Flaig and Ali R. Zand, Department of Chemistry & Biochemistry, Kettering University, Flint, MI 48504

ID 370 Continuous Improvement using Time Study and Lean Manufacturing - A Case Study

Ana Magana, Industrial Engineering Program, Lawrence Technological University, Southfield, Michigan 48075, USA

08:00 – 09:15, FRIDAY**Doctoral Dissertation Competition****Room Eng. E204**

Session Chair: Dr. Md. Mizanur Rahman, University Technology Malaysia

ID 206 Strategies and Techniques to Enhance Productivity in North American Automotive Industry

Amir Abolhassani, E. James Harner and Bhaskaran Gopalakrishnan, West Virginia University, Morgantown, WV, United States

ID 213 Developing a new Iterative Optimization-based Simulation (IOS) model with Predictable and Unpredictable Trigger Events in Simulated Time

Mohammad Dehghanimohammadabadi, Northeastern University, Boston, Massachusetts, United States

ID 219 Robust Solutions for Geographic Resource Allocation Problems

Mehdi Behrooz, University of Minnesota-Twin Cities, United States

ID 273 Multi Objective Optimization of Distributed Energy Systems Considering Renewable and Fossil Fuel Resources

Ali ElKamel and Azadeh Maroufmashat, University of Waterloo, Waterloo, Canada
 Sourena Sattari, Tehran, Iran

08:00 – 09:15, FRIDAY**Graduate Student Paper Competition****Room Eng. E205**

Session Chairs: Dr. Ahm Shamsuzzoha, Sultan Qaboos University, Oman and Hayder Zghair, Kettering University, Flint, MI, USA

ID 245 Worst-case demand distributions in vehicle routing

Mehdi Behrooz, University of Minnesota-Twin Cities, United States
 John Carlsson, University of Southern California, Los Angeles, California, United States

ID 184 An optimization model for scheduling emergency operations with multiple teams

Behrooz Bodaghi and Palaneeswaran Ekambaram, Swinburne University of Technology, Hawthorn, Victoria, Australia

ID 264 An ILP Model for Healthcare Facility Location Problem with Long Term Demand

Ruilin Ouyang, Department of Mathematics, Northeastern University, Boston, MA, USA
 Tasnim Ibn Faiz and Md Noor-E-Alam, Department of Mechanical and Industrial Engineering, Northeastern University, Boston, MA, USA

ID 328 Data Analytics and Visualization in Analyzing Mortality Records

Md Noor-E-Alam and Mehul R Patel, Northeastern University, Boston, Massachusetts, United States

08:00 – 09:15, FRIDAY**GD&T Workshop****Room Eng. E206**

8:00 - 8:20 am **GD&T ASME Standards and Fundamentals**

Saso Krstovski, Ford Motor Company

8:20 - 8:40 am **Ford Corporate GD&T Training and how engineers and designers work together on daily basis on GD&T application and drawing including standards**

Rochelle Courson, Product Design Senior, GD&T and Ford Standards – Global Engine Engineering Dept., Ford Motor Company

8:40 - 9:30 am **GD&T Fundamental and Rules**

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

08:00 – 09:15, FRIDAY

Room Eng. E207

Monte Carlo Simulation & Optimization for Robust Design with DiscoverSim **Workshop****John Noguera**, Chief Technology Officer & Co-Founder, SigmaXL Inc.

9:15 – 9:30 - Break

Session – Friday (September 23): 9:30 – 11:00 am09:30 am – **Welcome Address****Dr. Virinder K. Moudgil**President of Lawrence Technological University
A200 – Architecture Auditorium10:00 am – **Opening Keynote****Carlo Materazzo**Head of World Class Manufacturing (WCM), FCA – Global
Fiat Chrysler Automobiles (FCA), Auburn Hills, Michigan
A200 – Architecture Auditorium

11:00 – Networking Break at Exhibition Hall – A210

Session – Friday (September 23): 11:15 – 12:45 pm11:15 am - 12:00 pm – **Keynote****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 Africa12:00 – 12:45 pm – **Keynote****Mr. Kevin Poet**Plant Manager, Rawsonville Component Plant
Ford Motor Company, Ypsilanti, MI
A200 – Architecture Auditorium

11:30 – 12:45, FRIDAY

GD&T Workshop

Room Eng. E206

11:00 am - 12:00 pm: **GD&T Implementations Issues in Design and Manufacturing**
Maksud Haq, Fiat Chrysler Automobiles (FCA)12:00 -1:00 pm: **GD&T with Hands-on Practices**
Brian P. Heersink, DM/GDT/Gauging CAD Primary, CAD/CAE Department, TDE, Ford Motor Company

11:30 – 12:45, FRIDAY

Room Eng. E207

Monte Carlo Simulation & Optimization for Robust Design with DiscoverSim **Workshop****John Noguera**, Chief Technology Officer & Co-Founder, SigmaXL Inc.12:45 – 1:00 pm – **Networking Break at Exhibition Hall – A210**

1:00 pm - **Lunch Keynote****Dr. Jeffrey Abell**

GM Technical Fellow, Lab Group Manager, Manufacturing Systems Research
General Motors Global Research and Development, Warren, Michigan
A200 – Architecture Auditorium (Lunch Provided)

2:00 – 2:30 pm – **Networking Break at Exhibition Hall – A210****Session – Friday (September 23): 2:30 – 3:45 pm****2:30 – 3:45, FRIDAY****Global Engineering Education II****Room Eng. E200**

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

2:30 – 2:55:

Adedeji B. Badiru, Ph.D., PE, PMP, FIIE

Dean, Graduate School of Engineering and Management
Professor of Systems Engineering
AFIT/EN, Air Force Institute of Technology
Wright-Patterson Air Force Base
Dayton, Ohio, USA

2:55 – 3:20:

Dr. M. Abbot Maginnis

Lean Systems Program Academic Coordinator &
Director of Certificate Studies
University of Kentucky
Lexington, KY

3:20 – 3:45:

Dr. Jayant Trewn, Fellow ASQ

Adjunct Faculty
A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University
Southfield, MI 48075, USA

Dr. Lynn Miller-Wietecha

Interim Director
eLearning Architect and Program Producer
Department of eLearning
Lawrence Technological University
Southfield, MI 48075, USA

2:30 – 3:45, FRIDAY**Industry Solutions II****Room Eng. E201**

Session Chair: Foad Hosseinkhanli, Amor Health Services, Inc., Brownsville, Texas, USA

2:30 – 2:55:

Edly Ferdin Ramly

Certification Director
EFR Certification
Johor Bahru, Malaysia

2:55 – 3:20:

Md Kawsar Ali

Chief Operating Officer
Comfit Composite Knit LTD
Dhaka, Bangladesh

3:20 – 3:45:

Foad Hosseinkhanli

Director of Quality Assurance, Performance and Business Improvement
Amor Health Services, Inc.
Brownsville, Texas, USA

2:30 – 3:45, FRIDAY**Lean****Room Eng. E202**

Session Chair: Javed Cheema, Altarum Institute, Ann Arbor, Michigan, United States

ID 039 Relationship between lean manufacturing implementation and leadership styles

Carlos Ernani Fries, Guilherme Tortorella and Diego de Castro Fettermann, Federal University of Santa Catarina, Florianopolis, Brazil

ID 045 Lean Gamification between Industry and University

Ahmed Deif, California Polytechnic State University, San Luis Obispo, CA, United States

ID 120 Designing an Efficient Medical Logistic System Using Kanban in Large Hospital Systems

Javed Cheema, Altarum Institute, Ann Arbor, Michigan, United States

Muhammad Bajwa, Henry Ford Health System, West Bloomfield, Michigan, United States

ID 128 The Applicability of Lean Maintenance in The Container Handling Industry

Akram Ebeid, Suez Canal Container Terminal (APMT) / AAST, Alexandria, Alexandria, Egypt

ID 339 Optimization in the management of time in the emergency service for patients triage 2.

V́ctor Jaime Garća Urdaneta, Universidad del Rosario, Bogot́, Colombia

Santiago Moros Portilla, Manager of the emergency service of Hospital Mayor (Mederi), Bogot́, Colombia

Eliana K. Acuña Cárdenas, Logistic coordinator of the pharmacy service, Universidad del Rosario, Bogot́, Colombia

Valeria Mendoza Cortés, Universidad del Rosario, Bogot́, Colombia

2:30 – 3:45, FRIDAY**Operations Research****Room Eng. E203**

Session Chair: Md Noor-E-Alam, Northeastern University, Boston, Massachusetts, United States

ID 224 Scheduling on Two Uniform Machines with Unit Processing Times and Conflict Graph

Mourad Boudhar, Faculty of Mathematics, USTHB University Bab-Ezzouar, Algiers, Algeria

ID 264 An ILP Model for Healthcare Facility Location Problem with Long Term Demand

Md Noor-E-Alam, Tasnim Ibn Faiz and Ruilin Ouyang, Northeastern University, Boston, Massachusetts, United States

ID 215 An Efficient Approach for Traveling Salesman Problem Solution with Branch-and-Bound

Abdul Talib Bon, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

F Sukono, Universitas Padjadjaran, Indonesia

Mochamad Suyudi, Universitas Padjadjaran Bandung, Indonesia

ID 121 Path planning for a mobile robot using ant colony optimization and the influence of critical obstacle

Jihee Han, HyungJune Park and Yoonho Seo, Korea University, Seoul, Korea

ID 319 Causes of poor quality on SMEs: A Case of Gauteng SMEs, South Africa

Charles Mbohwa and Lawrance Seseni, University of Johannesburg, South Africa

2:30 – 3:45, FRIDAY**Energy****Room Eng. E204**

Session Chair: Azadeh Maroufmashat, University of Waterloo, Canada

ID 017 Analysis of Energy Cost Savings by Substituting Heavy Fuel Oil with Alternative Fuel for a Pozzolana Dryer. Case Study of Bamburi Cement

Veronica Ngunzi, Kisii University, Kisii, Kenya

ID 172 Experimental Analysis of Power Consumption in Ceiling Fan

Rupesh Bhortake and Vaishali Bhortake, TSSM's PVPIT, Bavdhan, Pune, Maharashtra, India

ID 225 Bio-diesel as an Alternative Fuel (Description, Benefits and Production Process)

Majid Baseer Sarhad University of Science and Information Technology, Peshawar, Pakistan

Muhammad Arsalan Khan, SUIT, Peshawar, Pakistan

Abdul Shakoor, UET, Peshawar, Pakistan

ID 227 Effects of Temperature and Droplet Size on the Ignition Delay of Diesel and Bio-Diesel Blends

Majid Baseer, Sarhad University of Science and Information Technology, Peshawar, Pakistan

Muhammad Arsalan Khan, SUIT, Peshawar, Pakistan

Abdul Shakoor, UET, Peshawar, Pakistan

Alam Zaib Khan, UET, Peshawar, Pakistan

ID 277 Technical and Economic Feasibility Study of Methanol Production from Flaring Gas in Iran

Azadeh Maroufmashat, University of Waterloo, Canada

Sourena Sattari, Tehran, Iran

2:30 – 3:45, FRIDAY**Manufacturing and Design****Room Eng. E205**

Session Chair: Viktoriia Butenko, Karlsruhe Institute of Technology, Karlsruhe, Baden-Württemberg, Germany

ID 131 Design and Validation of Prototype a Selective Laser Sintering System for Process Parameter Optimization

Abass Enzi and James Mynderse, Lawrence Technological University, Southfield, Michigan, USA

ID 167 Engineering Trade-Off Strategies Design Evaluation for Fabrication Company in the Philippines

Maricar Navarro and Bryan Navarro, Technological Institute of the Philippines, Quezon City NCP, Philippines

ID 174 Development of construction catalog for appropriate design of fiber reinforced Polymers

Viktoriia Butenko, Markus Spadinger and Albert Albers, Karlsruhe Institute of Technology, Karlsruhe, Baden-Württemberg, Germany

ID 238 Development of a dust minimization system for the coal wagon tippler section for a coal power plant

Charles Mbohwa and Ignatio Madanhire, University of Johannesburg, South Africa

ID 338 Predictive Control Design of Gas Turbine Using Multi-Objective Optimization ApproachKamal Jafarian, Biosignal Processing Lab, Dept. of Biomedical Engineering, Science and Research Branch, Islamic Azad University, Tehran, Iran
Mohammadsadegh Mobin, Dept. of Industrial Engineering and Engineering Management, Western New England University, Springfield, MA, USA
Zahra Honarkar, Department of Aerospace Engineering, Sharif University of Technology, Tehran, Iran**2:30 – 3:45, FRIDAY****GD&T Workshop****Room Eng. E206**2:30 - 3:15 pm **GD&T Experience**

Mark E. Foster, President, Applied Geometrics, Inc. (AGI), Harwood Heights, Illinois

3:15 – 3:45 **Gaging and Inspection Experiences on GD&T**

Jim Beary, NAO Inspection Technologies Manager & Dimensional Engineering Instructor, Benteler Automotive, Grand Rapids, Michigan

2:30 – 3:45, FRIDAY**Room Eng. E207****Monte Carlo Simulation & Optimization for Robust Design with DiscoverSim Workshop**

John Noguera, Chief Technology Officer & Co-Founder, SigmaXL Inc.

2:30 – 3:45, FRIDAY**Doctoral Dissertation Competition****Room Eng. E208**

Session Chair: Dr. Md. Mizanur Rahman, University Technology Malaysia

ID 289 Environmental Pollution Reduction in Cement Industry for CO₂ Combustion of Waste Tyre and Coal as a Fuel

Rajendra Patil and Kanhayyalal Barbole, TSSM'S Padmabhooshan Vasantdada Patil Institute of Technology Bavdhan, Pune, Maharashtra, India

ID 363 Reliability Modeling and Optimization of New product Development Process

Mohammadsadegh Mobin, Western New England University, Springfield, MA, United States

ID 356 Analysis of Operational Efficiency Methods at Saudi Aramco: Applying Continuous Improvement Best Practices

Ahmed Aljabr and Daw Alwerfalli, Lawrence Technological University, Southfield, Michigan, USA

ID 372 Effective Attribute Charts for Monitoring Manufacturing and Service Industries

Salah Haridy, H. Milton Stewart School of Industrial & Systems Engineering at Georgia Tech, Atlanta, GA, USA

2:30 – 3:45, FRIDAY**Graduate Student Paper Competition****Room Eng. E209**

Session Chairs: Dr. Ahm Shamsuzzoha, Sultan Qaboos University, Oman and Hayder Zghair, Kettering University, Flint, MI, USA

ID 362 An Intuitionistic Fuzzy-Based DEMATEL to Rank Risks of Construction ProjectsAmin Vafadarnikjoo, Department of Management and Accounting, Allameh Tabataba'i University, Tehran, Iran
Mohammadsadegh Mobin, Dept. of Industrial Engineering and Engineering Management, Western New England University, Springfield, MA, USA
Seyyed Mohammad Ali Khatami Firoozabadi, Department of Management and Accounting, Allameh Tabataba'i University, Tehran, Iran**ID 205 What is Instagram? A social Media or a News Media**

Sahar Maqsood, CUST, Islamabad, Pakistan

ID 266 Healthcare Delivery Framework for Urgent Care at Home

Tasnim Ibn Faiz, Ali Al-Muflih and Md Noor-E-Alam, Department of Mechanical and Industrial Engineering, Northeastern University, Boston, USA

3:45 – 4:00: Break**Session – Friday (September 23): 4:00 – 5:15 pm****4:00 – 5:15, FRIDAY****Global Engineering Education III****Room Eng. E200**

Session Chair: Paul Nutter, Ohio Northern University

4:00 – 4:25:

Srinivas Ganapathyraju, Ph.D

Professor and Coordinator

Electromechanical Engineering Technology

Sheridan College Institute of Technology & Advanced Learning

Brampton, Ontario, Canada

4:25 – 4:50:

Dr. Rashmi Jha

Associate Professor and Program Coordinator of Master of Computer Applications
Gitarattan International Business School
Guru Gobind Singh Indraprastha University
New Delhi, India

4:50 – 5:15:

Paul Nutter, MBA, CMfgE, CQE, CQA

Associate Professor and Chair
Department of Technological Studies
Ohio Northern University
Ada, Ohio, USA

4:00 – 5:15, FRIDAY**Industry Solutions III****Room Eng. E201**

Session Chair: Zakir Siddique, Cooper Standard Automotive, Novi, Michigan

4:00 – 4:25:

Sardar Asif Khan, M.Sc., MBA, PE, PMP

Manager - World Class Manufacturing (WCM)
Mack Engine Plant
Fiat Chrysler Automobiles (FCA)
Detroit, Michigan

4:25 – 4:50:

Moin Baig

CAE Engineer Airbag systems
General Motors Company
Warren, Michigan

Lean Product Development

4:50 – 5:15:

Zakir Siddique, PMP

Senior Program Manager
Cooper Standard Automotive
Novi, Michigan

4:00 – 5:15, FRIDAY**Quality and Reliability****Room Eng. E202**

Session Chair: Mark Dolsen, TRQSS Inc., Tecumseh, ON, Canada

ID 287 Sustained Quality Award Status in Developing Country: A study on the Dubai Quality Award Recipients

Mehran Doulat and Shari Yusof, UTM, KL, Malaysia

ID 165 Reliability Modeling for Rotor Systems with Imbalance Based on Vibration Analysis

Mohamed Shafiullah Hussain V, National Institute of Foundry and Forge Technology, Ranchi, Jharkhand
V N A Naikan, Indian Institute of Technology, Kharagpur, West Bengal, India

ID 117 Scheduling group of jobs with the dedicated processing property on parallel machine shops

Sang-Oh Shim, Department of Business Administration and Accounting, Hanbat National University, South Korea

ID 274 Mizen Boushi in Mass Production: a framework for maintaining reliability in a dynamic environment

Mark Dolsen, Eric Legary and Murray Phillips, TRQSS Inc., Tecumseh, ON, Canada

ID 280 Reliability Evaluation and Design Optimization of Inventory Management System

Abdulaziz T. Almaktoom, Effat University, Jeddah, Mecca, Saudi Arabia
Krishna Krishnan and Ahmed Alsaadi, Wichita State University, Wichita, Kansas, United States

4:00 – 5:15, FRIDAY**Operations Management****Room Eng. E203**

Session Chair: Tony Chihak, Mayo Clinic, Rochester, MN, United States

ID 005 Empirical Research Methodology on Operation Diagnosis to Identify Operation Improvement Opportunities

Musli Mohammad, Mohd Shahir Yahya and Edly Ferdin Ramly, Universiti Tun Hussein Onn Malaysia (UTHM), Batu Pahat, Johor, Malaysia

ID 181 Simulating Supplier-Producer Relationship in halal food Supply chain Using Agent Based Modeling

Layung Prasetyanti, Tokyo University of Science, Noda-shi, Chiba, Japan

ID 211 Improving Semiconductor Back-End Final Test Throughput via Rfid-Based Lot Control System

Rosnah Mohd Yusuff, Universiti Putra Malaysia, UPM Serdang, Selangor, Malaysia
Sia Ying Ying, Serdang, Selangor, Malaysia
Mohd Amin Mohd Soom, Sandakan, Sabah, Malaysia

ID 230 Concurrent engineering: the drawbacks of applying a one-size-fit all approach

John Bang Mathiasen and Rasmus Munksgaard Mathiasen, Aarhus University Department of Business Development and Technology, School of Business and Social Sciences, Herning, Denmark

ID 043 How the Industrial Engineer can Bend the Healthcare Cost Curve

Tony Chihak, Mayo Clinic, Rochester, MN, United States

4:00 – 5:15, FRIDAY**Design and Analysis****Room Eng. E204**

Session Chair: Sarder Sadique, Marshall University, Huntington, WV, United States

ID 281 Evaluating Customer Retention and Satisfaction and the Reasons of Losing Customers in Auto Insurance (A case study)

Afshan Roshani, Western New England University, Springfield, MA, United States

Zahra Daneshfar, Allameh Tabataba'i University, Tehran, Iran

Hamid Sabzali, Tehran Azad University, Tehran, Iran

ID 284 Design of Experiments and Web Page Designs: Theories and Applications

Lihui Shi, Centerfield Corporation, El Segundo, California, United States

ID 127 Empirical Correlation of Consistency and Time of Trajectory for Industrial Robots

Hayder Zghair and Salem Lakrash, Lawrence Technological University, Southfield, MI, United States

ID 135 Impact of Design Simplification Analysis (DSA) on Automotive Product Development

Daw Alwerfalli, A. Leon Linton Dertment of Mechanical Engineering, Lawrence Technological University, United States

ID 129 Best Material for Commercial packaging of Food products and Incorporating Track and Trace systems

Sarder Sadique, Shaik Habeeb, Jinkala Chandra and Vatsal Bhatt, Marshall University, Huntington, WV, United States

4:00 – 5:15, FRIDAY**Construction Management****Room Eng. E205**

Session Chair: Daw Alwerfalli, Lawrence Technological University, United States

ID 013 Framework for Implementing Quality Management in West Bank Construction Projects

Ahmad Rashed, Nassar Stone, Hebron, West Bank, West Bank and Gaza

Mohammad Othman, An-Najah National University, Nablus, West Bank, West Bank and Gaza

ID 023 Literature Review: Improving health and safety in the construction industry through cultural transformation

Natalie Skeepers, University of Johannesburg, South Africa

ID 252 Advancing Towards Delay-Free Construction Project: A Review

Shahryar Sorooshian, Faculty of Technology, University Malaysia Pahang, Kuantan, Pahang, Malaysia

Richard Hannis Ansah, University of Malaysia Pahang, Kuantan, Pahang, Malaysia

Shariman Mustafa, Universiti Malaysia Pahang, Kuantan, Pahang, Malaysia

ID 253 Assessment of Environmental Risks in Construction Projects: A Case of Malaysia

Shahryar Sorooshian, Faculty of Technology, University Malaysia Pahang, Kuantan, Pahang, Malaysia

Richard Hannis Ansah, University of Malaysia Pahang, Kuantan, Pahang, Malaysia

Shariman Mustafa, Universiti Malaysia Pahang, Kuantan, Pahang, Malaysia

ID 254 An Environmental Impact Framework for Evaluating Construction Projects Delays

Shahryar Sorooshian, Faculty of Technology, University Malaysia Pahang, Kuantan, Pahang, Malaysia

Richard Hannis Ansah, University of Malaysia Pahang, Kuantan, Pahang, Malaysia

Shariman Mustafa, Universiti Malaysia Pahang, Kuantan, Pahang, Malaysia

ID 136 Application of Quality Management Systems (QMS) in Construction Industry

Daw Alwerfalli, A. Leon Linton Dertment of Mechanical Engineering, Lawrence Technological University, United States

Muteb Alshammari and Aslihan Karatas, Civil and Architectural Engineering, Lawrence Technological University, United States

4:00 – 5:15, FRIDAY**GD&T Workshop****Room Eng. E206****3:45 – 4:15 pm GD&T Experiences and Implementation Issues**

Tom Geiss, Lead Course Developer – GD&T Basics, ASME Senior GD&T Certified Professional, Pareto Learning LLC, South Carolina

4:15 – 4:45 pm GD&T Experiences

John-Paul Belanger, Certified Sr. GD&T Professional, President, Geometric Learning Systems, Detroit, Michigan

4:45 – 5:15 pm Tolerance Stack up

Dr. Ahad Ali, Associate Professor, Director of BSIE and MSIE Programs and Director of Smart Manufacturing and Lean Systems Research Group at Lawrence Tech

4:00 – 5:15, FRIDAY**Room Eng. E207****Monte Carlo Simulation & Optimization for Robust Design with DiscoverSim Workshop**

John Noguera, Chief Technology Officer & Co-Founder, SigmaXL Inc.

5:30 – Poster Session

September 24, 2016 (Saturday)

Session: 8:00 – 9:15 am

08:00 – 09:15, SATURDAY
Global Engineering Education IV
Room Eng. E200

Session Chair: Dr. Farnaz Ghazi-Nezami, Kettering University, Flint, Michigan, USA

08:00 – 08:25:

Dr. Md. Mizanur Rahman

Senior Lecturer

Department of Thermo Fluids

Faculty of Mechanical Engineering

University Technology Malaysia (UTM)

Skudai, Johor Bahru, Malaysia

08:25 – 08:50:

Dr. Eui H. Park

Graduate Program Coordinator

Professor, Department of Industrial and Systems Engineering

North Carolina A&T State University

Greensboro, North Carolina

08:50 – 09:15:

Farnaz Ghazi-Nezami, PhD, CSSGB

Assistant Professor

Industrial and Manufacturing Engineering Department

Kettering University

Flint, Michigan, USA

08:00 – 09:15, SATURDAY
Industry Solutions IV
Room Eng. E201

Session Chair: Joseph Ghislain, Ford Motor Company

8:00 – 8:25 am:

Abdul Talib Bon and Ooi Shi Jun

Department of Production and Operations Management

Universiti Tun Hussein Onn Malaysia

Raja, Johor, Malaysia

8:25 – 8:50 am:

Srini Mandadapu, MSE, MBA

Quality Leader - Product Development

Lead Master Black Belt (MBB)

General Motors

8:50 – 9:15 am:

Joseph Ghislain

North America Regional Manager & Global Body Exterior& Body Interior

Ford Motor Company - Lean Supplier Optimization (LSO), Global Purchasing

6-Sigma Black Belt, CEM, REM, CSDP, CP EnMS- Industrial, SEP P.V. – Industrial

Dearborn, Michigan

08:00 – 09:15, SATURDAY
Lean
Room Eng. E202

Session Chair: John Carrier, MIT Sloan School of Management, Arlington, MA, United States

ID 180 Effects of Human/Work Stress on Reliability of Lean Systems – a Markovian Approach

Rupy Sawhney, Roshanak Akram and Vahid Ganji, University of Tennessee, Knoxville, TN, United States

ID 239 An Investigation of Lean Manufacturing Implementation in Textile Industries of Pakistan

Zahid Abbass Shah and Hadia Hussain, University of the Punjab, New Campus, Lahore, Punjab, Pakistan

ID 256 Lean Construction Tools

Shahryar Sorooshian, Richard Hannis Ansah and Shariman Mustafa, Faculty of Technology, University Malaysia Pahang, Kuantan, Malaysia

ID 276 A Tale of Two Systems - How to Solve the Hidden Factory Problem

John Carrier, MIT Sloan School of Management, Arlington, MA, United States

Muhammed Asif, Rochester, MI, United States

ID 329 New Perspectives in Valued Service Excellence in Manufacturing Industry

Charles Mbohwa and Makhala Mpho Motebele, University of Johannesburg, South Africa

08:00 – 09:15, SATURDAY**Operations Management****Room Eng. E203**

Session Chair: Mohammed Baki, University of Windsor, Windsor, Ontario, Canada

ID 242 Standard Transformation Formulation Framework for Robust Optimization Technique with Application on Healthcare Delivery Systems

Morteza Lalmazlounian, Mohammed Baki and Majid Ahmadi, University of Windsor, Windsor, Ontario, Canada

ID 267 Composite Index Creation Using AHP: Efficiency Optimization for the Health Care Industry

Mohammed Baki and Andrea Yzeiri, University of Windsor, Windsor, Ontario, Canada

ID 288 Analysis of change management using SAP-LAP hillsHari Krishnan Thampi and Pramod V R, Dept. of Mechanical Engineering, NSS College of Engineering Palakkad, India
Abdul Samad K, Malabar Cements Ltd. Walayar Palakkad, India**ID 258 Econometric models for decision making in IT services**Joaquin Fernando Sanchez and Martha M Cuellar Cahves, San Mateo Educacion superior, Bogota. Cundinamarca, Colombia
Rishnan Thampi, N.S.S College of Engineering, Thiruvananthapuram, Kerala, India**ID 327 Barriers of sharing tacit knowledge: A case of Gauteng agricultural SMMEs, South Africa**

Charles Mbohwa and Lawrance Seseni, University of Johannesburg, South Africa

08:00 – 09:15, SATURDAY**Modeling and Simulation****Room Eng. E204**

Session Chair: Ali ElKamel, University of Waterloo, Ontario, Canada

ID 162 Optimizing Cleaning Schedules of Heat Exchanger Networks

Mohamed Elsholkami, Ali ElKamel and Chandra Mouli Madhuranthakam, University of Waterloo, Waterloo, Ontario, Canada

ID 175 Interaction Frame Works and Supply Chain System Reliability

Sankar Sengupta and Deepa Sharma, Oakland University, Rochester, Michigan, United States

ID 240 A Binary Integer Programming Model for the Job Shop Scheduling Problem

Ahmed Azab, Mohammed Baki and Alejandro Vital Soto, University of Windsor, Windsor, Ontario, Canada

ID 262 A Combined Analytical and Simulation-Based Approach to WIP Improvement

Duane Shortt, Webasto Roof Systems, Clarkston, Michigan, United States

ID 160 Design optimization of an electrolytic hydrogen for the Sarnia-Lambton upgrader

Mohamed Elsholkami and Ali ElKamel, University of Waterloo, Ontario, Canada

08:00 – 09:30, SATURDAY**Engineering Education****Room Eng. E205**

Session Chair: Ibrahim Mustafa, Yanbu Industrial College, Royal Commission for Jubail and Yanbu, Saudi Arabia

ID 042 Improving Quality of Technical Education by Quality Function Deployment (QFD)

Mohan Khond, Shrinivas Patil, Swapnil Sonawane, Chaitanya Shrishrimal and Aarti Bhattu, College of Engineering Pune, Maharashtra, India

ID 187 Applying Marching Band Concepts to Develop High Performing Teams

Thomas Seubert, R3D Consulting, Roseville, MI, United States

ID 271 Review on the research culture and management taking into account values of respect and cooperation.

Martha M Cuellar Cahves, San Mateo Educacion superior, Bogota, Cundinamarca, Colombia

ID 332 Implementation of Problem-Based Learning (PBL) in Chemical Thermodynamics Course at the Yanbu Industrial College, Saudi Arabia

Ibrahim Mustafa, Yanbu Industrial College, Royal Commission for Jubail and Yanbu, Saudi Arabia

08:00 – 09:15, SATURDAY**CAE with Hypermesh Workshop****Room Eng. E206****DM Noor Ruhul Alam**Design Release Engineer
General Motors Technical Center
Warren, Michigan**08:00 – 09:15, SATURDAY****Lean Six Sigma Workshop****Room Eng. E207****Jayant Trewn, ASQ Fellow, Ph.D.**Lean Six Sigma Master Black Belt
Performance Coach and Advisor**9:15 – 9:30 – Break**

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

Aaron Rubel

Engineering Lead - Cabin & Cargo Standard Parts, Flammability Certification, & Mass Properties,
Certified Lean Six Sigma Black Belt
AIRBUS Americas Engineering, Inc.
A200 – Archetecture Auditorium

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

Dr. Srinivas Garimella

Leader - Additive Manufacturing Center of Excellence
Eaton Corporation, Southfield, Michigan
A200 – Archetecture Auditorium

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

Session – Saturday (September 24): 11:30 am – 12:45 pm

11:30 – 12:45, SATURDAY

Global Engineering Education V

Room Eng. E200

Session Chair: Dr. Devdas Shetty, University of the District of Colombia

11:30 – 11:55:

Dr. Daw Alwerfalli

Professor and Director of Master of Engineering Management Program
A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University
Southfield, Michigan, USA

11:55 – 12:20:

Dr. Devdas Shetty

Dean, School of Engineering and Applied Sciences
Professor of Mechanical Engineering
University of the District of Colombia
Washington DC, USA

12:20 – 12:45:

Dr. Mohammad Miftaur Rahman Khan Khadem

Assistant Professor
Department of Mechanical and Industrial Engineering
Sultan Qaboos University
Muscat, Oman

11:30 – 12:45, SATURDAY

Industry Solutions V

Room Eng. E201

Session Chair: Dr. Mehran Doulat, Razak School of Engineering and Advanced Technology, UTM Kuala Lumpur, Malaysia

11:30 – 11:55:

Foad Hosseinkhanli

Director of Quality Assurance, Performance and Business Improvement
Amor Health Services, Inc.
Brownsville, Texas, USA

11:55 – 12:20:

Mehran Doulat, BSc., MEM, MQM, EFQM, Ph.D.

Senior Research Fellow
Genichi Taguchi Center for Quality and Sustainability
Razak School of Engineering and Advanced Technology
UTM Kuala Lumpur, Kuala Lumpur, Malaysia

12:20 – 12:45:

Dr. Ishtiaq Hussain

Manufacturing Process Lead
General Motors Corporation
World Head Quarters, Pontiac, Michigan

11:30 – 12:45, SATURDAY**Six Sigma****Room Eng. E202**

Session Chair: Oviri Umude-Igbru, Aston University, Birmingham, United Kingdom

ID 177 The Role of Technology in Outsourcing practices in Nigerian Oil and Gas Industry - Further Analysis

Nnamdi Ogbuke, University of Central Lancashire Preston UK, Preston, Lancashire, United Kingdom

Yahaya Yusuf, Lancashire Business School, Lancashire, Preston, United Kingdom

Jan Hewitt, School of Management, Lancashire, Preston, United Kingdom

ID 279 Critical Success Factors for Successful Implementation of Six Sigma in Pakistani Industries

Zahid Abbass Shah, University of the Punjab, New Campus, Lahore, Punjab, Pakistan

Asfa Muhammad Din, The University of Lahore, Lahore, Punjab, Pakistan

ID 303 Optimization of Thermal Profile Process in Assembly Line of Printed Circuit Boards (PCB) Using Design of Experiments

Kamal Alzameli and Daw Alwerfalli, Lawrence Technological University, Southfield, Michigan, USA

Ahmed Alsamarai, Product Devolvment Center, Ford Motor Company, Dearborn, Michigan, USA

ID 137 Perceptions of the Implementation of Lean Six Sigma: A case of the U.K. and Nigerian Manufacturing Industries

Oviri Umude-Igbru and Brian Price, Aston University, Birmingham, West Midlands, United Kingdom

11:30 – 12:45, SATURDAY**Production Planning and Management****Room Eng. E203**

Session Chair: Ghorbanmohammad Komaki, Case Western Reserve University, Cleveland, OH, United States

ID 124 Demand Forecasting for Strategic Resource Planning

Abdul Talib Bon, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

ID 210 Investigating the relationship between team-working and production agility in manufacturing organizations

Abbas Mahmoudabadi and Donya Nader, MehrAstAn University, Astaneh-e-Ashrafieh, Gilan, Iran

ID 223 Intelligent integrated MRP, MPS and Detail Scheduling

Saif Ullah Khan, Huazhong University of Science and Technology, China

ID 231 Scheduling multi-objective unrelated parallel machines using hybrid reference-point based NSGA-II algorithm

Ghorbanmohammad Komaki and Behnam Malakooti, Case Western Reserve University, Cleveland, OH, United States

ID 358 An investigation into the dynamics of supply chain practices in Dairy industry: A Pilot Study

Arvind Bhardwaja, Rahul S Morb, Sarbjit Singhc and Manish Devd, Department of Industrial & Production Engineering, Dr BR Ambedkar National Institute of Technology, Jalandhar, Punjab, India

11:30 – 12:45, SATURDAY**Modeling and Simulation****Room Eng. E204**

Session Chair: Duane Shortt, Webasto Roof Systems, Clarkston, Michigan, United States

ID 275 Integration of Renewable Energy into Oil & Gas Industries: Solar-aided Hydrogen Production

Ali ElKamel and Azadeh Maroufmashat, University of Waterloo, Waterloo, Canada

Chonnawee Likkasit and Hong-ming Ku, Thonburi, Bangkok, Thailand

ID 161 Design optimization of a microreactor for the production of biodiesel

Mohamed Elsholkami, Chandra Mouli Madhuranthakam and Ali ElKamel, University of Waterloo, Ontario, Canada

ID 226 Thermal Stress Analysis of Cyclic Braking In a Disc Brake

Majid Baseer, Sarhad University of Science and Information Technology, Peshawar, Pakistan

Muhammad Arsalan Khan, SUIT, Peshawar, Pakistan, Pakistan

Asnaf Aziz, Sarhad University of Science and Information Technology, Peshawar, KPK, Pakistan

ID 159 Techno-economic analysis of a peatland gasification process for methanol synthesis and power production

Mohamed Elsholkami, Ali ElKamel and William Anderson, University of Waterloo, Ontario, Canada

ID 263 A Structured Simulation-Based Methodology of Batch Size Optimization to Minimize Unit Cost

Duane Shortt, Webasto Roof Systems, Clarkston, Michigan, United States

11:30 – 12:45, SATURDAY**Industry Best Practices****Room Eng. E205**

Session Chair: Sankar Sengupta, Oakland University, Rochester, MI, United States

ID 250 An integrated MOEA and MCDM for Multi-Objective Optimization (Case study: control chart design)

Samrad Jafarian-Namin, Industrial Engineering Department, Faculty of Engineering, Yazd University, Yazd, Iran

Mohamad Amin Kaviani, Young Researchers and Elite Club, Shiraz branch, Islamic Azad University, Shiraz, Iran

Elaheh Ghasemi, Aghigh Institute of Higher Education, Shahinshar, Isfahan, Iran

ID 255 Use of Quality Assurance in Manufacturing Mine Roof Bolts for a Platinum Mine: Case study

Charles Mbohwa and Ignatio Madanhire, University of Johannesburg, South Africa

ID 044 The Value of Stakeholders Analysis in the process of a Textile Company in Puebla State

César De La Luz and Maria de Los Angeles Gomez, Universidad Popular Autónoma del Estado de Puebla AC, Puebla, Mexico

ID 169 The Move It Forward Theory (MIFT) offers a better method to manage major machine failure in a serial flow line
Sankar Sengupta and William Edwards, Oakland University, Rochester, MI, United States

ID 304 Possibilities of sustainable transport in City of Johannesburg (CoJ) of South Africa
Sebonkile Thaba, University of Johannesburg, South Africa

11:30 – 12:45, SATURDAY

CAE with Hypermesh Workshop

Room Eng. E206

DM Noor Ruhul Alam
Design Release Engineer
General Motors Technical Center
Warren, Michigan

11:30 – 12:45, SATURDAY

Lean Six Sigma Workshop

Room Eng. E207

Jayant Trewn, ASQ Fellow, Ph.D.
Lean Six Sigma Master Black Belt
Performance Coach and Advisor

12:45 – 1:00 pm – Networking Break – Exhibition Hall – A210

1:00 pm SATURDAY LUNCH KEYNOTE:

Mr. John Fleming

Executive VP Manufacturing & Labor Affairs (retired)
Ford Motor Company
A200 – Architecture Auditorium (Boxed Lunch Provided)

2:00 – 2:30 pm Networking Break – Exhibition Hall – A210

Session – Saturday (September 24): 2:30 – 3:45 pm

2:30 – 3:45, SATURDAY

Global Engineering Education VI

Room Eng. E200

Session Chair: Dr. Srinivas R. Chakravarthy, Kettering University, Flint, Michigan, USA

2:30 – 2:55:

Dr. Srinivas R. Chakravarthy
Professor and Department Head
Industrial and Manufacturing Engineering
Kettering University
Flint, Michigan, USA

2:55 – 3:20:

Robert P. Van Til, Ph.D.
Pawley Professor of Lean Studies and Chair
Industrial and Systems Engineering Department
Oakland University
Rochester, Michigan, USA

3:20 – 3:45:

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

2:30 – 3:45, SATURDAY

Industry Solutions VI

Room Eng. E201

Session Chair: Mohammad Hijawi, Fiat Chrysler Automobiles (FCA), Auburn Hills, Michigan

2:30 – 2:55:

Michelle (Matson) Hackett
CAD Production Manager
RGIS
Auburn Hills, Michigan

2:55 – 3:20:

Mohammad Hijawi

Technical Fellow – Powertrain Quality Reliability Engineering
 Chair – FCA US Technical Council
 Fiat Chrysler Automobiles (FCA)
 Auburn Hills, Michigan

3:20 – 3:45:

Muhammad Arif Islam

Functional Safety Manager
 Breaking Engineering
 ZF TRW
 Livonia, Michigan

2:30 – 3:45, SATURDAY**Sustainable Manufacturing****Room Eng. E202**

Session Chair: Ali Mostafaeipour, Industrial Engineering Department, Yazd University, Yazd, Iran

ID 251 Warranty Analysis of Remanufactured Electrical Products

Wilkistar Otieno and Yuxi Liu, University of Wisconsin-Milwaukee, Milwaukee, WI, United States

ID 204 Developing a System for Sustainable Product Design and Manufacture

Devdas Shetty, University of the District of Columbia, United States

ID 118 A Way Forward to Attain Lean Manufacturing Status through Transformational Leadership

Syed Masood and Rafiullah Khan, International Islamic University, Islamabad, Pakistan
 Shahzad Qureshi, NUST College of E & ME Rawalpindi, Pakistan

ID 331 The Use of Knowledge Management as A Sustainable Competitive Advantage in African Manufacturing Settings: An Architectural and Economic Analysis for 21st century

Makhala Mpho Motebele, University of Johannesburg, South Africa

ID 337 Evaluation of hydrogen production from wind turbines: A case study

Ali Mostafaeipour, Industrial Engineering Department, Yazd University, Yazd, Iran
 Omid Alavi, Department of Electrical Engineering, K.N. Toosi University of Technology, Tehran, Iran

2:30 – 3:45, SATURDAY**Project Management****Room Eng. E203**

Session Chair: Nihan Kabadayi, Business School of Istanbul University, Istanbul, Istanbul, Turkey

ID 168 Importance of having a systematic approach for providing proactive communication about project key indicators & health during customer acquisition and product delivery life cycle

M Dhanvijay and Nikhil Nazarkar, College of Engineering, Pune, India

ID 234 Considering the time value of money for modeling the risk assessment of cost and time components in construction projects

Abbas Mahmoudabadi, MehrAstan University, Astaneh, Gilan, Iran
 Roghaye Mousazade, Organization for Development, Renovation and equipping schools of Tehran Province, Tehran, Iran

ID 286 A study on how to improve PMBOK guidelines performance by simulation Case Study: National Gas Company of Lorestan province

Moslem Parsa and Fatemeh Jaferi, Lorestan Gas Company, Khorramabad, Iran

ID 179 Service Quality Analysis with Using a Fuzzy AHP Methodology: A case study in Veterinary Hospital in Turkey

Nihan Kabadayi and Birgul Kucuk Cirpin, Business School of Istanbul University, Istanbul, Istanbul, Turkey

ID 298 Hiv/Aids Humanitarian Supply Chain Management: The Case of Zimbabwe

Charles Mbohwa and Tatenda Talent Chingono, University of Johannesburg, South Africa

2:30 – 3:45, SATURDAY**Supply Chain Management and Logistics****Room Eng. E204**

Session Chair: Dr. Rashmi Jha, Gitarattan International Business School, Guru Gobind Singh Indraprastha University, New Delhi, India

ID 014 Productivity Mapping for a Reverse Logistics Warehouse with n series and m Parallel Processes

Anupam Tripathi, Flipkart Internet Pvt. Ltd., Bangalore, Karnataka, India
 Ashish Kumar Chaudhary, Flipkart, Bangalore, Karnataka, India
 Rohit Kunal, Flipkart, Bangalore, Karnataka, India

ID 163 A Study on Japanese Automotive Firms and Managing Supply Chain Vulnerability

Yacob Khojasteh, Graduate School of Global Studies, Sophia University, Tokyo, Japan
 Yasutaka Kainuma, Graduate School of System Design, Tokyo Metropolitan University, Tokyo, Japan

ID 188 A Decision Support Model to Select Suppliers in Apparel industry

Deepthi Wickramaarachchi and Chami Keerthisinghe, University of Moratuwa, Colombo, Western province, Sri Lanka

ID 123 Airport Connectivity Evaluation: The Study of Thailand

Tipavinee Suwanwong and Apichat Sopadang, Chiang Mai University, Muang District, Chiang Mai, Thailand

2:30 – 3:45, SATURDAY**Data Analytics****Room Eng. E205**

Session Chair: Abdullah Alrabghi, University of Jeddah, Saudi Arabia

ID 158 Factors That Explain the Propensity of a Customer to be Promoter of a Brand of Telecommunications Services

Diego Jose Gomez Montoya, Manuela Beltrán University, Bogotá, Colombia

ID 259 Wastewater effluents & Optimizing Aeration Process

Ali Asadi, Anoop Verma and Kai Yang, Wayne State University, Detroit, Michigan, United States

ID 328 Data Analytics and Visualization in Analyzing Mortality Records

Md Noor-E-Alam and Mehul R Patel, Northeastern University, Boston, Massachusetts, United States

ID 301 Maintenance modelling: revisiting common assumptions

Abdullah Alrabghi, University of Jeddah, Saudi Arabia

ID 349 An Assessment of Service Quality Delivery in Selected Local Authorities in Namibia

Nestor Sheefeni, Faculty of Engineering, Namibia University of Science and Technology, Windhoek, Namibia

Michael Mutingi, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa and Namibia University of Science and Technology, Windhoek, Namibia

2:30 – 3:45, SATURDAY**CAE with Hypermesh Workshop****Room Eng. E206****DM Noor Ruhul Alam**Design Release Engineer
General Motors Technical Center
Warren, Michigan**2:30 – 3:45, SATURDAY****Lean Six Sigma Workshop****Room Eng. E207****Jayant Trewn, ASQ Fellow, Ph.D.**Lean Six Sigma Master Black Belt
Performance Coach and Advisor**3:45 – 4:00 – Break****Session – Saturday (September 24): 4:00 – 5:15 pm****4:00 – 5:15, SATURDAY****Global Engineering Education VII****Room Eng. E200****Dr. Matthew Ohland**Professor, School of Engineering Education
Purdue University
West Lafayette, Indiana, USA**CATME SMARTER Teamwork****4:00 – 5:15, SATURDAY****Industry Solutions VII: Women in Industry and Academia****Room Eng. E201**

Session Chair: Dr. Rashmi Jha, Guru Gobind Singh Indraprastha University, New Delhi, India

Dr. Galia NovakovaFaculty of Mathematics and Informatics
Sofia University, Bulgaria**Dr. Rashmi Jha**Associate Professor and Program Coordinator of Master of Computer Applications
Gitarattan International Business School
Guru Gobind Singh Indraprastha University
New Delhi, India**Dr. Chee-Ming Chan**Associate Professor and Deputy Dean (Academic and Research), Centre for Graduate Studies
Universiti Tun Hussein Onn Malaysia
Batu Pahat, Johor, Malaysia**Ms. Priyadarshani Premaratne**Lecturer, Department of Sociology
University of Peradeniya
Peradeniya, Sri Lanka

4:00 – 5:15, SATURDAY**Manufacturing and Reliability****Room Eng. E202**

Session Chair: Yahaya Yusuf, Lancashire Business School, Lancashire, Preston, United Kingdom

ID 046 Technical and economic impacts on different methods of improving the performance of a gas pipeline

Amar Benmounah, University of Boumerdes UMBB, Boumerdes, Algeria

ID 164 A guideline of quality steps towards Zero Defect Manufacturing (ZDM) in Industry

Ragnhild Eleftheriadis and Odd Myklebust, SINTEF/NTNU, Trondheim, Norway

ID 122 A new cell formation with part family clustering in cellular manufacturing system

Raj Mahdavi, Mazandaran university of Science and Technology, Babol, Mazandaran, Iran

ID 237 Eco –industrial park framework development to enhance waste management: Case study

Charles Mbohwa and Ignatio Madanhire, University of Johannesburg, South Africa

ID 132 Calculate Layer Depth of Selective Laser Sintering Depending on Processing Time

Abass Enzi and James Mynderse, Lawrence Technological University, Southfield, MI, United States

4:00 – 5:15, SATURDAY**Production Planning and Management****Room Eng. E203**

Session Chair: John Ikome, Tshwane University of Technology, Gauteng, South Africa

ID 125 Modeling Analytical Hierarchy Process and Fuzzy Inference System Tsukamoto for Crude Palm Oil Production Planning

Abdul Talib Bon, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

ID 222 Multi-level Capacitated lot-sizing with Backlogging and Environmental Considerations

Ahmed Azab, Nusrat Chowdhury and Mohammed Baki, University of Windsor, Ontario, Canada

ID 320 A framework for sharing knowledge within SMMEs: A South African Study

Charles Mbohwa and Lawrence Seseni, University of Johannesburg, South Africa

ID 142 Using Simulation Modeling To Increase Throughput In The plants

Ahad Ali, Abass Enzi and James Mynderse, Lawrence Technological University, Southfield, MI, United States

ID 260 Advance Method of Re-scheduling after a Machine Breakdown. Case Study Ceramic Manufacturing Plant South Africa.

John Ikome, Tshwane University of Technology, Gauteng, South Africa

4:00 – 5:30, SATURDAY**Inventory Management****Room Eng. E204**

Session Chair: Chandra K. Jaggi, University of Delhi, Delhi, India

ID 112 Study and Optimization of inventory of an Automobile showroom

Shailee Dalal, Pandit Deendayal Petroleum University, Vadodara Municipal City Limits, Gujarat, India

ID 126 Supply System Design of a Lubricant Distributor Company in Colombia

Nelson Tovar, Universidad de Ibagué, Ibagué, Tolima, Colombia

Rodríguez Jhonny, Functional Foods, Bogotá, Cundinamarca, Colombia

ID 192 The Dynamic Research on High-speed Railway Seat Inventory Control

Fan Chengpeng, Wuhan, Hubei, China

ID 305 Sustainable enterprise development through strategic sourcing

Sebonkile Thaba, University of Johannesburg, Johannesburg, South Africa

ID 193 Optimal Ordering Policy for non-instantaneous deteriorating items with partially backlogged and stock dependent demand under two-warehouse storage facility

Chandra K. Jaggi, University of Delhi, Delhi, India

4:00 – 5:15, SATURDAY**Entrepreneurship and Innovation****Room Eng. E205**

Session Chair: José G Vargas-hernández, University of Guadalajara, Zapopan, Jalisco, Mexico

ID 020 Open Innovation through Virtual Business Network: Perspective from Small and Medium Enterprises

AHM Shamsuzzoha, MMR Khan and Mahmoud Al Kindi, Sultan Qaboos University, Muscat, Oman

Petri Helo, University of Vaasa, Pohjanmaa, Finland

Maqsood Sandhu, Al Ain, United Arab Emirates

ID 141 NAV Smart Bike

Navpreet Singh, CGC-College of Engineering, Mohali, Punjab, India

ID 166 A meta-analysis of electronic sensors applying in inventions of young students

Jon-Chao Hong and Chi-Ruei Tsai, National Taiwan Normal University, Taipei, Taiwan

ID 272 The Value of Intellectual Property and Challenges faced in the Implementation. Case Study SA

John Ikome, Tshwane University of Technology, Gauteng, South Africa

ID 330 Return Patterns and Restructuring of Distressed Manufacturing Firms: Smart Innovation Approach

Charles Mbohwa and Makhala Mpho Motebele, University of Johannesburg, South Africa

ID 037 Mergers, Acquisitions and Strategic Alliances in the Film Industry in Mexico

José G Vargas-hernández, University Center for Economic and Managerial Sciences, University of Guadalajara Zapopan, Jalisco, Mexico

4:00 – 5:15, SATURDAY**CAE with Hypermesh Workshop****Room Eng. E206****DM Noor Ruhul Alam**

Design Release Engineer

General Motors Technical Center

Warren, Michigan

4:00 – 5:15, SATURDAY**Lean Six Sigma Workshop****Room Eng. E207****Jayant Trewn, ASQ Fellow, Ph.D.**

Lean Six Sigma Master Black Belt

Performance Coach and Advisor

7:00 – 10:00 pm (Saturday)**CONFERENCE AWARD DINNER****Rod Ridler Field House****Award Keynote:****Hulas King**

Director, Diversity, Professional Affiliations & Global Community Relations

SIEMENS PLM Software

St. Louis, Missouri, USA

IEOM Symposium on Lean Six Sigma**Bogota Colombia, May 13, 2016****Venue:** Universidad del Rosario Campus**Symposium Chair:****Sandra Milena Chacon Sanchez**

Director of Logistics and Production Program, Universidad del Rosario, Bogota, Colombia

Student Coordinator: Valeria Mendoza Cortes**IEOM Symposium on Lean Six Sigma, GD&T and Industrial Engineering Tools and Techniques**
Xiangtan, Hunan, China, August 2 - 4, 2016**Theme:** "The Challenge of Industrial Engineering and Operations Management for Sustainable Manufacturing and Service Systems in China"**Organized by:** IEOM Society of China and IEOM Society International

September 25, 2016 (Sunday)

Session: 8:00 – 9:15 pm

08:00 – 09:15, SUNDAY

Global Engineering Education VIII

Room Eng. E200

Session Chair: Dr. Mukti M. Rana, Delaware State University, Dover, DE, USA

08:00 – 08:25:

Dr. Mukti M. Rana

Associate Professor and Chair
Department of Physics and Engineering &
Optical Science Center for Applied Research
Delaware State University
Dover, DE, USA

08:25 – 09:15: 50 min

Dr. Harun Rashid

Harun Rashid Director of Staff Mentoring and Coaching
Hamadeh Educational Services serving Star International Academy, Universal Learning Academy, Universal Academy, and Noor International Academy
&
Adjunct Faculty
College of Education
Wayne State University
Detroit, Michigan, USA

08:00 – 09:15, SUNDAY

Industry Solutions VIII

Room Eng. E201

Session Chair: Gregg Young, Young Associates, Inc., Midland, MI

08:00 – 08:25:

Walter Schwartz

Sustainability & Business Strategy Supervisor
Ford Motor Company

08:25 – 08:50:

Bob Doering, MBA

Quality Engineering Professional
Expert in CorrectSPC for Precision Machining - Trainer, Consultant
Lagrange, Ohio

08:50 – 09:15:

Gregg Young

President and Founder
Young Associates, Inc.
Midland, MI

"Lost Secrets of the Origin of Six Sigma"

08:00 – 09:15, SUNDAY

Quality and Reliability

Room Eng. E202

Session Chair: Petri Helo, University of Vaasa, Pohjanma, Finland

ID 233 Computer Aided Process Planning Software for Cost Reduction and Increase in Production Rate

Bhaskaran Gopalakrishnan and Omar Al-Shebeeb, West Virginia University, Morgantown, WV, United States

ID 270 Modeling and Optimization in a new Machining Production Line by using Manufacturing System Simulation

Khaleel Al ithawi, Lawrence Technological University, Southfield, MI, United States

ID 335 Quality Delivery Service as a Strategy: Profile and Perspectives for Excellence achievement within OPRAG

Jean-Prosper BeluiEssimengane, Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa
Tawanda Mushiri, Faculty of Engineering, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
Charles Mbohwa, University of Johannesburg, Johannesburg, South Africa

ID 110 Cloud-based Virtual Supply Chain

AHM Shamsuzzoha, Sultan Qaboos University, Muscat, Oman
Petri Helo, University of Vaasa, Pohjanma, Finland
Maqsood Sandhu, Al Ain, United Arab Emirates

ID 345 Design of a cost optimized bench saw cutting machine for wood with automatic braking system

Tawanda Mushiri, Department of Mechanical Engineering, University of Johannesburg, South Africa
Fortune Masarakufa, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
Charles Mbohwa, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

08:00 – 09:15, SUNDAY**Engineering Management****Room Eng. E203**

Session Chair: Olatunde Banwo, Coventry University, Coventry, West-Midlands, United Kingdom

ID 040 Decision making with the analytical hierarchy process (AHP) for materials and design selection in the POPE lawn mower manufacturing for minimizing environmental impacts

Abbas Mohammed, University of South Australia, Adelaide, Modbury, Australia

ID 111 Identification of Challenges Facing Public Construction Industry in Palestine

Ahmad Rashed, Nassar Stone, Hebron, West Bank, West Bank and Gaza

Hanan Taha, Engineering, Bethlehem, West Bank, West Bank and Gaza

Abd Al Fattah Shamleh, An-Najah National University, Nablus, West Bank, West Bank and Gaza

ID 176 Development of a procurement decision support system to enhance construction project delivery – From claims management perspective

Olatunde Banwo, George Agyekum-Mensah and Andrew Arewa, Coventry University, Coventry, West-Midlands, United Kingdom

ID 236 Collaborative Project Management and Governance with a Focus on Inter-Firm system Integration within the High Tech Industry.

Majid Baseer, Sarhad University of Science and Information Technology Peshawar Pakistan

08:00 – 09:15, SUNDAY**Operations Research****Room Eng. E204**

Session Chair: Behrooz Bodaghi, Swinburne University of Technology, Hawthorn, Victoria, Australia

ID 119 A survey on fuzzy mathematical programming models based on a new approach to fuzzy ordering

Hadi Nasser, Babolsar, Mazandaran, Iran

ID 134 Nonlinear Mathematical Solution for Quadratic Assignment Problem: Real-World Application of Turkish Airforce Academy's Master Plan

Timur Keskin, Istanbul University, School of Business, Istanbul, Marmara, Turkey

Abdullah Emir Barkin, Turkish Airforce Academy, Istanbul, Marmara, Turkey

Kerem Karakaya, Turkish Airforce Academy, Istanbul, Marmara, Turkey

ID 171 Modifying a Multi-Objective Genetic Algorithm Method for Active Sonar Clutter Reduction using Real-World Data

Mark Gammon, Defence R&D Canada Atlantic Research Centre, Halifax, NS, Canada

ID 184 An optimization model for scheduling emergency operations with multiple teams

Behrooz Bodaghi and Palaneeswaran Ekambaram, Swinburne University of Technology, Hawthorn, Victoria, Australia

ID 283 Composite Desirability Function (CDF) Approach for Evolutionary Algorithm Parameter Tuning

Mohammad Komaki, Case Western Reserve University, Cleveland, OH, United States

08:00 – 09:15, SUNDAY**Case Studies****Room Eng. E205**

Session Chair: Maricar Navarro, Technological Institute of the Philippines, Quezon City, NCP, Philippines

ID 002 Save water; save our next generation

Jahangir Alam, Comfit Composite Knit Ltd., Mirzapur, Tangail, Bangladesh

ID 016 Simulation-Aided Production and Operations for Food and Beverage Plants

Vincent Bechard, SNC-Lavalin, Montreal, Quebec, Canada

ID 185 Investigating the Effectiveness of SMS Marketing in Increasing the Sale of Insurance in the Bank Branches (A Case Study)

Afshan Roshani, Western New England University Springfield, MA, United States

Zahra Daneshfar, Allameh Tabataba'i University, Tehran, Iran

Hamid Sabzali, Tehran Azad University, Tehran, Iran

ID 249 System Architecture Design and Implementation of Trading Technology in one of the brokerage company in the Philippines

Maricar Navarro and Bryan Navarro, Technological Institute of the Philippines, Quezon City, NCP, Philippines

Mary Grace Benignos, I.T. Interaction Philippines, Angono, Rizal, Philippines

ID 257 Performance Evaluation using Balanced Scorecard (BSC) and Fuzzy TOPSIS technique Case Study: National Iranian Gas Company

Moslem Parsa, Fatemeh Jaferi and Meysam Biranvand, Lorestan Gas Company, Khorramabad, Iran

08:00 – 09:15, SUNDAY**Human Factors and Ergonomics****Room Eng. E206**

Session Chair: Carlos Ernani Fries, Federal University of Santa Catarina, Florianopolis, Brazil

ID 041 A case study on implementing lean ergonomic manufacturing systems (LEMS) in an automobile industry

Srinivasa Rao, National Institute of Technology, Jamshedpur, Jharkhand, India

Malay Niraj, National Institute of Technology, Jamshedpur, Tatanagar, Jharkhand, India

ID 247 Design and Implementation of a Database for Safety and Ergonomics in Engineering Research Labs

Faisal Aqlan, Penn State Behrend, Erie, PA, United States

ID 038 Lean manufacturing and socio-technical and ergonomics practices implementation

Carlos Ernani Fries, Guilherme Tortorella, Lizandra Lupi Vergara and Evelise Pereira Ferreira, Federal Univ. of Santa Catarina, Florianopolis, Brazil

08:00 – 09:15, SUNDAY

Lean Six Sigma Workshop

Room Eng. E207

Jayant Trewn, ASQ Fellow, Ph.D.Lean Six Sigma Master Black Belt
Performance Coach and Advisor**Session – Sunday (September 25): 9:30 – 11:00 am**9:30 – 10:15 am - **Sunday Morning Keynote:****Dr. Helmuth Ludwig**Executive VP, Digital Enterprise Realization & Chief Manufacturing Officer
Siemens PLM Software
A200 – Architecture Auditorium10:15 – 11:00 am - **Sunday Morning Keynote:****Richard D. Shainin**Executive Vice President
Shainin, The Red X Company
Washington, D.C.
A200 – Architecture Auditorium11:15 – 11:45 am **Sunday Morning Keynote:****Jd Marhevko**Vice President of Quality, Lean and EHS Systems
Accuride Corporation
A200 – Architecture Auditorium**Session – Sunday (September 25): 11:30 am – 12:45 pm**11:45 am – 12:15 am **Keynote****Dr. Kai Yang**Professor, Department of Industrial and Systems Engineering and
Director, Healthcare Systems Engineering Group
Wayne State University, Detroit, Michigan
A200 – Architecture Auditorium12:15 – 12:45 **Keynote****Prabhu Patil**President and CEO
Prolim Corporation
Dallas/Fort Worth, Texas
A200 – Architecture Auditorium

11:30 – 12:45, SUNDAY

Lean Six Sigma Workshop

Room Eng. E207

Jayant Trewn, ASQ Fellow, Ph.D.

Lean Six Sigma Master Black Belt, Performance Coach and Advisor

12:45 – 1:00 pm – Networking Break – Exhibition Hall – A210

1:00 pm **Sunday Lunch Keynote:****Steven Sibrel**

Senior Supplier Quality Manager
Harman International, Novi, Michigan, USA
and
Chair - ASQ Greater Detroit

14:00 – Networking Break – Exhibition Hall – A210

Session – Sunday (September 25) – 2:30 – 3:45 pm**2:30 – 3:45, SUNDAY****Global Engineering Education IX****Room Eng. E200**

Session Chair: Dr. Mohammad Rahman, Central Connecticut State University

2:30 – 2:55:

Dr. Jamal Bari

Associate Professor
Coordinator of Electronic Engineering Technology
School of Engineering Technology
Eastern Michigan University
Ypsilanti, Michigan

2:55 – 3:20:

Dr. Jacqueline Chestnut

Adjunct Professor
Industrial and Systems Engineering Department
College of Engineering
North Carolina A&T State University
Greensboro, NC, USA

3:20 – 3:45:

Dr. Mohammad Rahman

Assistant Professor
Manufacturing and Construction Management Department
Central Connecticut State University
New Britain, CT, USA

2:30 – 3:45, SUNDAY**Industry Solutions IX****Room Eng. E201**

Session Chair: Ahmed Al-Jabr, Saudi IEOM Society, Dhahran, Saudi Arabia

2:30 – 2:55:

Abdul Talib Bon and Silvia Firda Utami

Department of Production and Operations Management
Universiti Tun Hussein Onn Malaysia
Johor, Malaysia

Sukono

Department of Mathematics, Faculty of Mathematics and Natural Sciences
Universitas Padjadjaran
Bandung, Indonesia

2:55 – 3:20:

Ahmed Al-Jabr, CMBB

President, Saudi IEOM Society
Dhahran, Saudi Arabia

3:20 – 3:45:

Ishak Zaman

Product Development Engineer
Ford Motor Company

2:30 – 3:45, SUNDAY**e-Business and Information Technology****Room Eng. E202**

Session Chair: Buddhika Ranaweera, Anuradhapura, Sri Lanka

ID 246 Predict the Click-Through-Rate and Average Cost-Per-Click for Keywords Using Machine Learning Methodologies

Lihui Shi, Centerfield Corporation, El Segundo, California, United States

ID 265 Social Media Marketing: A Scientific Framework

Seyed Mohammad Jafar Jalali and Mohammad Taghi Taghavifard, Tehran, Iran

ID 019 Applying Technology to Educational Delivery and Its Management: Lesson from Nigeria

Todowede Babatunde Joel, Lagos State University, Ojo - Lagos Nigeria, Ojo, Lagos, Nigeria

ID 035 Demographic influences on the adoption and use of e-government services in Sri Lanka

Buddhika Ranaweera, Anuradhapura, Sri Lanka

ID 348 A Service Quality Assessment of Internet Banking of Commercial Banks in Namibia in the Absence of Face to Face Encounter

Johannes Mutesi, Faculty of Engineering, Namibia University of Science and Technology, Windhoek, Namibia

Michael Mutingi, Faculty of Engineering, Namibia University of Science and Technology, Windhoek, Namibia and Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

Ayon Charkraborty, Indian Institute of Management Tiruchirappalli, NIT Campus, Tamilnadu, India

2:30 – 3:45, SUNDAY**Sustainability and Green Systems****Room Eng. E203**

Session Chair: Liang Downey, IEEE Technology Engineering Management Society, Southfield, MI, United States

ID 048 Analytical and experimental analysis for comparison of performance characteristics of catalytic converters including simulation

Mohan Khond and Dhiraj Gore, College of Engineering Pune, Maharashtra, India

ID 186 Enabling the Future of Energy & Environment

Liang Downey, IEEE Technology Engineering Management Society, Southfield, MI, United States

ID 299 Social LCA, for sustainable bio-gas production by the city of Johannesburg

Charles Mbohwa and Tatenda Talent Chingono, University of Johannesburg, South Africa

ID 344 Design of a paper slitting and rewinding machine for a developing country, Zimbabwe

Tawanda Mushiri, Department of Mechanical Engineering, University of Johannesburg, Johannesburg, South Africa

Godfrey Mashana, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe

Charles Mbohwa, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

2:30 – 3:45, SUNDAY**Healthcare Systems****Room Eng. E204**

Session Chair: Faisal Aqlan, Penn State Behrend, Erie, PA, United States

ID 241 Process Improvement Approach to Investigate Low Block Utilization of Operating Rooms: A Case Study

Omar Ashour, Faisal Aqlan and Anne Pedersen, Penn State Behrend, Erie, PA, United States

ID 261 A new individual patient centric demand forecasting method.

Sankar Sengupta, Oakland University, Rochester, MI, United States

ID 266 Healthcare Delivery Framework for Urgent Care at Home

Md Noor-E-Alam, Tasnim Ibn Faiz and Ali Al-Muflih, Northeastern University, Boston, Massachusetts, United States

ID 316 Increased efficiency of the dispensing of the surgery room pharmacy

Valeria Mendoza Cortes, Eliana Acuña and Victor Garcia, Universidad Del Rosario, Bogotá, Colombia

ID 248 Lean Process Improvement of First Case Scheduling in Operating Rooms

Faisal Aqlan, Omar Ashour and Anne Pedersen, Penn State Behrend, Erie, PA, United States

2:30 – 3:45, SUNDAY**Financial Engineering****Room Eng. E205**

Session Chair: Abdul Talib Bon, Universiti Tun Hussein Onn Malaysia

ID 036 Defining authentication method of financial software applications by analysing user activities history

S.M. Tofayel Ahmad and Prakash Chandra Mondal, Bangladesh Bank (The Central Bank of Bangladesh), Dhaka, Bangladesh

ID 214 The APT with Lagged, Value-at-Risk and Asset Allocations by Using Econometric Approach

Sukono and Sudradjat Supian, Department of Mathematics, Padjadjaran University, Bandung, Indonesia

Abdul Talib Bon, Department of Production and Operations, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Malaysia

ID 217 Comparison between the Models of GARCH and EGARCH in Predicting the Change of Composite Stock Price Index

Endang Soeryana hasbullah, Sukono, and Sudradjat Supian, Department of Mathematics, Padjadjaran University, Bandung, Indonesia

Nur Fadhina bt Abdul Halim, School of Informatics and Applied Mathematics, University Malaysia Terengganu, Terengganu - Malaysia

Abdul Talib Bon, Department of Production and Operations, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Malaysia

ID 296 Drilling Rig Selection and Cost Analysis: a Comparison of Top Drive and Rotary Table Drilling Systems

Walid M. Mahmud and Saber Kh. Elmabrouk, Petroleum Engineering Department, Faculty of Engineering, University of Tripoli, Tripoli, Libya

ID 341 Economical evaluation of passive systems for residential buildings in Kerman, Iran

Ali Mostafaeipour, Industrial Engineering Department, Yazd University, Yazd, Iran

Hossein Goudarzi, School of Architecture and Environmental Design, Iran University of Science and Technology, Tehran, Iran

2:30 – 3:45, SUNDAY**Entrepreneurial Mindset: Opportunity Recognition****Room Eng. E206****Professor Donald M. Reimer**

College of Engineering

Lawrence Technological University, Southfield, Michigan, USA

2:30 – 3:45, SUNDAY**Lean Six Sigma Workshop****Room Eng. E207****Jayant Trewin, ASQ Fellow, Ph.D.**

Lean Six Sigma Master Black Belt

Performance Coach and Advisor

3:45 – 4:00 pm - Break**Session – Sunday (September 25) – 4:00 – 5:15 pm****4:00 – 5:15, SUNDAY****Global Engineering Education X****Room Eng. E200**

Session Chair: Dr. Zakaria Mahmud, Lake Superior State University, Sault Sainte Marie, Michigan

4:00 – 4:25:

Quamrul Mazumder, Ph.D., P.E.

Associate Chair and Associate Professor

Department of Mechanical Engineering

University of Michigan – Flint

4:25 – 4:50:

Dr. Walton Hancock

Professor Emeritus Industrial and Operations Engineering and

Professor Emeritus of Health Services, Management and Policy

University of Michigan

Ann Arbor, MI, USA

4: 50 – 5:15:

Dr. Zakaria Mahmud

Associate Professor, Mechanical Engineering

Lake Superior State University

Sault Sainte Marie, Michigan

4:00 – 5:15, SUNDAY**Industry Solutions X****Room Eng. E201**

Session Chair: Dr. Taufiqul Islam, IEOM Society International, Michigan

4:00 – 4:25:

Gregg Young

President and Founder

Young Associates, Inc., Midland, MI

"Using Active Time Profiles to Jumpstart Lean and Cycle Time Improvement"

4:25 – 4:50:

Nirav Sheth

Manufacturing Engineer

Eberspaecher North America

Brighton, Michigan

4: 50 – 5:15:

Dr. Taufiqul Islam

Operations Manager

IEOM Society International

Canton, Michigan

5: 15 – 5:40:

Jack He

Vice President

MCC (Xiang Tan) Mining Equipment LLC

Xiangtan City, Hunan

China

4:00 – 5:15, SUNDAY**Operations Management****Room Eng. E202**

Session Chair: Mohamad Amin Kaviani, Islamic Azad University of Shiraz, Iran

ID 292 Improving the Management of Operations at the “Office des Ports et RAdes du Gabon” (OPRAG). The road to achieve and sustain Quality Service delivery.

Charles Mbohwa and Jean Prosper Belui Essimengane, University of Johannesburg, South Africa
Tawanda Mushiri, University of Zimbabwe, Zimbabwe

ID 295 Reservoir Management Strategies for Development of Water Injection Planning Project

Saber Elmabrouk and Walid Mahmud, University of Tripoli, Libya

ID 315 Supply Chain Resilience Assessment: A Grey Systems Theory Approach

Mohamad Amin Kaviani, Young Researchers and Elite Club, Shiraz branch, Islamic Azad University of Shiraz, Iran
Mohammad Sadegh Mobin, Western New England University, Springfield, MA, United States
Eleonora Bottani, Department of Industrial Engineering, University of Parma, Parma, Italy

ID 310 Reliability Engineering Management in the Petrochemical Environment: The Air Separation Unit

Arnesh Telukdarie and Richter Stadler, University of Johannesburg, South Africa

ID 334 Knowledge Retention and Stabilisation within OPRAG: A Management must for the Excellence achievement.

Jean-Prosper Belui Essimengane, Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa.
Tawanda Mushiri, Faculty of Engineering, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
Charles Mbohwa, University of Johannesburg, Johannesburg, South Africa

4:00 – 5:15, SUNDAY**Energy****Room Eng. E203**

Session Chair: Hari Agung Yuniarto, Universitas Gadjah Mada, Yogyakarta, Indonesia

ID 308 Sustainable Power Generation Pathways in Malaysia: Development of Long-range Scenarios

Md. Mizanur Rahman and Mohamed Syahril Nazreen Samsudin, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia

ID 350 Investigation of using Solar Energy: A Case Study

Ali Mostafaeipour and Mojtaba Qolipour, Industrial Engineering Department, Yazd University, Yazd, Iran

ID 300 Study on regulations, policies and permits for implementation of bioenergy systems

Charles Mbohwa and Tatenda Talent Chingono, University of Johannesburg, South Africa

ID 302 Socio-economic challenges within transport sector hindering sustainable transport in City of Johannesburg

Sebonkile Thaba, University of Johannesburg, South Africa

ID 326 Optimisation in Cutting Down Parameters for Industrial Bamboo

Hari Agung Yuniarto, Industrial Engineering, Universitas Gadjah Mada Sleman, D. I. Yogyakarta, Indonesia

ID 336 Effect of reducing the accuracy of wind speeds on distribution functions: A case study

Ali Mostafaeipour, Industrial Engineering Department, Yazd University, Yazd, Iran
Omid Alavi, Department of Electrical Engineering, K.N. Toosi University of Technology, Tehran, Iran

4:00 – 8:00, SUNDAY**Design and Analysis****Room Eng. E204**

Session Chair: Mohammadsadegh Mobin, Western New England University, Springfield, MA, United States

ID 340 Controlling Ground Vehicle Nonlinear Dynamics by the Use of Automobile Traction Models

Mohammed Alghassab, Amr Mahmoud and Mohamed A. Zohdy, Electrical and Computer Engineering Department, Oakland University, Rochester, MI 48309, USA

ID 341 Economical evaluation of passive systems for residential buildings in Kerman, Iran

Ali Mostafaeipour, Industrial Engineering Department, Yazd University, Yazd, Iran
Hossein Goudarzi, School of Architecture and Environmental Design, Iran University of Science and Technology, Tehran, Iran

ID 342 Using Wind Turbines for Hydrogen Production: A Case Study

Ali Mostafaeipour, Industrial Engineering Department, Yazd University, Yazd, Iran
Omid Alavi, Department of Electrical Engineering, K.N. Toosi University of Technology, Tehran, Iran

ID 346 Design of an automatic tyre pressure inflation system for small vehicles

Tawanda Mushiri, Department of Mechanical Engineering, University of Johannesburg, South Africa
Allan T. Muzhanje, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
Charles Mbohwa, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 357 Effective Utilization of Implementing TPM in Saudi Arabian Companies

Ahmed Aljabr, Lawrence Technological University, Southfield, Michigan, USA

Professor Donald M. Reimer

College of Engineering

Lawrence Technological University, Southfield, Michigan, USA

Jayant Trewn, ASQ Fellow, Ph.D.

Lean Six Sigma Master Black Belt

Performance Coach and Advisor

Posters

ID 015 AgiFlex System: An Approach towards Unification of Agility and Flexibility Dimensions from Manufacturing Perspective

Abid Ali, Wasim Ahmad and Zahid Rashid, University of Engineering and Technology Taxila, Taxila, Punjab, Pakistan

ID 018 Slack Variable Approach for Mixture Experiment

Javier Cruz-Salgado, Silao, Guanajuato, Mexico

ID 138 FMI based Co-Simulation Framework to enable timing verification in Cyber-Physical Systems

Jonathan Latorre, The George Washington University, United States

ID 173 Controlling Ground Vehicle Nonlinear Dynamics by the Use of Automobile Traction Models

Mohammed Alghassab, Oakland University, Rochester Hills, Michigan, United States

ID 182 State of the Art of Semantic Web

Ali Alqaazaz, Oakland University, Rochester Hills, Michigan, United States

ID 189 Application of Balanced Scorecard in the Libyan Construction Industry

Abdussalam Shibani, Coventry University, Coventry, United Kingdom

Nawal Gherbal, Coventry University, Coventry, United Kingdom

ID 190 Fault Tree Analysis of Hazardous Conditions and Near Misses in a Company: A Case Application

Mehmet Savsar and Mohamed Al-Ali, Kuwait University, Safat, Kuwait

ID 207 Stochastic Hierarchical Approach for Master Surgical Scheduling

Justin Britt, Ahmed Azab and Mohammed Baki, University of Windsor, Windsor, Ontario, Canada

ID 218 Wasserstein distance and the distributionally robust TSP

Mehdi Behrooz, University of Minnesota-Twin Cities, United States

John Carlsson, University of Southern California, Los Angeles, California, United States

ID 232 Applications of Lean Methodologies and Quality Improvement in Textile Industry

Ahmad Yame, Lawrence Technological University, Southfield, MI, United States

ID 285 Min-Max Appointment Scheduling Problem

M. Fazle Baki and Silvi Qemo, University of Windsor, Windsor, Ontario, Canada

ID 291 Challenges of Future Aircraft Propulsion Aircraft Electric Green Taxiing Intelligent System Rear View Camera, alarms and sensor

Ahmad Yame, Lawrence Technological University, Southfield, MI, United States

Hasan Asaibi, University of Detroit Mercy, Detroit, MI, United States

ID 294 Designing distribution networks of perishable products under stochastic demands and routes

Behnam Malmir, Kansas State University, Manhattan, Kansas, United States

Azam Aghighi, Tehran, Iran

ID 306 Optimizing Corrosion Protection of Stainless Steel 304 by Epoxy-Graphene Composite using Factorial Experimental Design

Hesham Alhumade, Aiping Yu, Ali Elkamel, Leonardo Simon, University of Waterloo, Ontario, Canada

ID 307 Neural Network Viscosity Models for Multi-Component Liquid Mixtures

Adel Elneihoum, Hesham Alhumade, Ibrahim Alhajri, Walid El Garwi, Ali Elkamel, University of Waterloo, Ontario, Canada

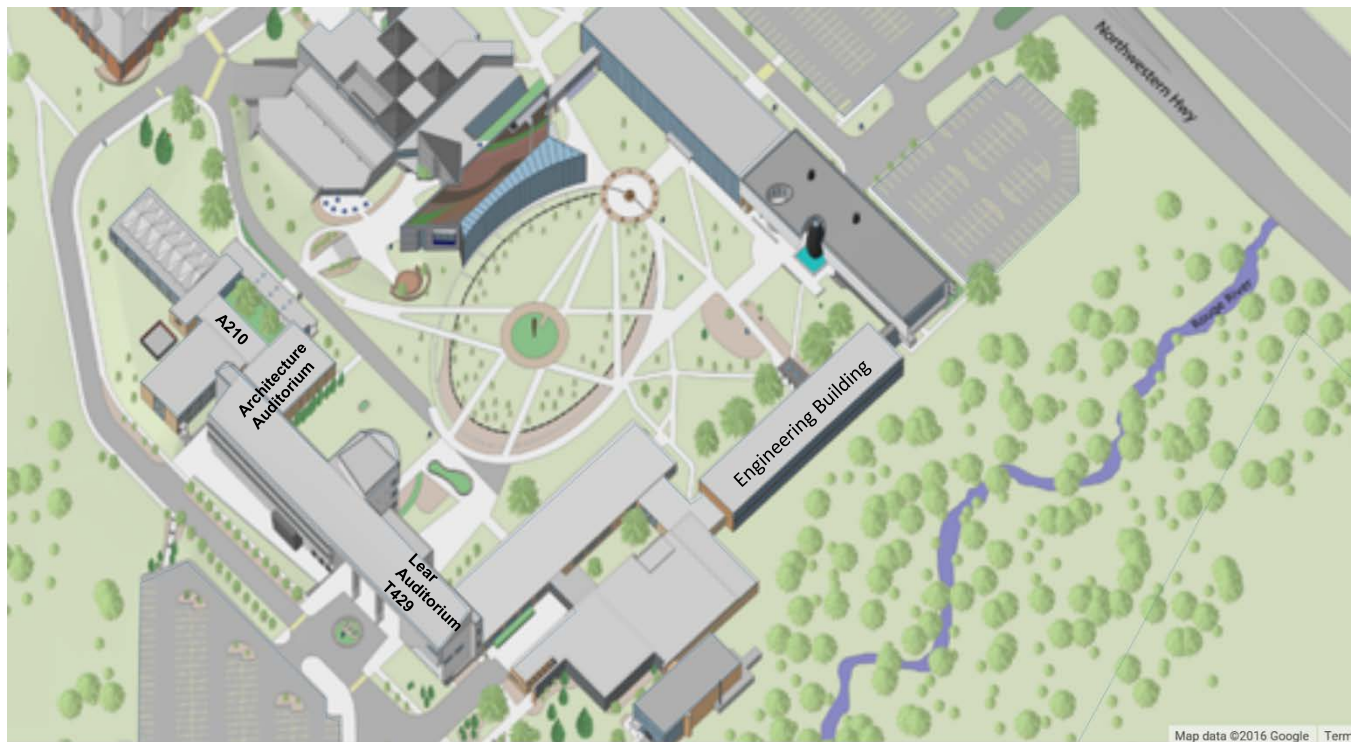
ID 309 Design and Optimization of a CO2 Pipeline Network for the Province of Alberta

Ali Elkamel, Basil Khan, Emmanuel Ikile, Manuel Tejeda, Mosopefoluwa Cole, Alaa Alalawi, Hesham Alhumade, University of Waterloo, Ontario, Canada

ID 371 Engineering Postgraduate Students' Perspective on Their Preparedness for the Job Market: Employability Attributes

Chee-Ming Chan, Centre for Graduate Studies, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia

Meeting Rooms Layout – Map of Lawrence Tech



All Keynotes in Archetecture Audotorium – A200

Registratiton and Exhibition - Archetecture Building – A210

All Technical Sessions - 2nd Floor of Engineering Building

E200 (Global Engineering Education)	E202	E204	E206 (Workshops)	
Rest Rooms	E201 (Industry Solutions)	E203	E205	E207 (Workshops)

GD&T Workshop in Lear Auditorium (T429)

Archetecture Building (Entrance from 3rd and 4th Floor)

Conference Award Dinner

Saturday, 7:00 – 10:00 pm

Venue: Don Ridler Field House
(Near Civic Drive, North Side of the Campus)

Exhibitors



Lawrence
Technological
University

SIEMENS



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IEOM Student Chapters

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

Suggested Student Chapter Activities

Workshops and Seminars – The chapter can sponsor workshops and seminars that focus on industrial engineering and operations management. Panel discussions featuring subject matter experts could be featured by industry segments: manufacturing, health, hospitality, education, chemical and plastic, food processing, etc.

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

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

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

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

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

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

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

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

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

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

IEOM Student Chapters around Globe

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

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

IEOM Professional Chapters

Australian IEOM Society
Saudi Arabian IEOM Society
IEOM Society of Bangladesh
Nigerian IEOM Society
IEOM Society of Malaysia
IEOM Society of Indonesia

IEOM Society of Costa Rica
IEOM Society of China
IEOM Society of Morocco
IEOM Society of Oman
IEOM Society of Bulgaria
IEOM Society of Colombia

IEOM Society of Greece
IEOM Society of Canada
IEOM Society of Michigan
IEOM Society of Virginia

Join IEOM Society - Be a Professional or Student Member

MEMBERSHIP BENEFITS

- Be part of the Diverse Industrial Engineering (IE) and Operations Management (OM) Profession
- Professional Development
- Access IEOM Publications

- IEOM Newsletters
- Access IEOM Online Resources
- Networking Opportunities
- Conferences and Seminars
- Career and Leadership Development

Distinguished Speakers – Industry Solutions

Friday, September 23, 2016

Session I: Industry Solutions

Room Engineering Building E201, 8:00 – 9:15 am (Friday)

Session Chair: Joe LaRussa, Brose Group, Auburn Hills, Michigan

08:00 – 08:25 (Friday)



Joseph J. LaRussa, PE

Industrial Engineering Manager - Drives
Brose North America, Inc.
Auburn Hills, Michigan, USA

Joe LaRussa is a registered professional engineer in the State of Michigan with diversified experience in product development, manufacturing engineering, and project management. He is personally responsible for over \$2.5M in financial benefit to his employers, and is currently responsible for Industrialization and Manufacturing Engineering for the Drives Business in North America at Brose, a global supplier of automotive mechatronic systems. In this role Joe leads a regional team in the planning and realization of industrialization projects, manufacturing business planning, and manufacturing technology road mapping. Joe is a member of SAE International and the Society of Manufacturing Engineers (SME), and Joe has served in other volunteer leadership roles at his alma mater, the University of Michigan-Dearborn, and NorthRidge Church in Plymouth.

08:25 – 08:50 (Friday)



Paul Ryznar

Founder, President and CEO
OPS Solutions
Novi, Michigan

Engineer, inventor and entrepreneur Paul Ryznar created Light Guide Systems and is the founder, president and CEO of Novi, Mich.-based OPS Solutions. Prior to Light Guide Systems' invention in 2005, he held senior management roles at Detroit Diesel and Bosch, as well as vice president of production technology at Energy Conversion Devices—more than 30 years of manufacturing experience.

Light Guide Systems uses proprietary software and high-powered projector systems to guide and confirm completion of complex tasks. From assembly to quality control to training, this technology provides the visualization, traceability and flexibility demanded by leading companies worldwide. Ryznar and his team have implemented systems in leading automotive manufacturers (including Fiat-Chrysler Group, Daimler AG and Johnson Controls) as well as for applications in aerospace, heavy equipment and health sciences.

Ryznar earned both an engineering degree (BSME) and an MBA from the University of Michigan.

08:50 – 09:15 (Friday)

Ahmad Rashed

Faculty of Engineering and Faculty of Graduated studies
An Najah National University
Nablus, Palestine

Palestinian Construction Sector

Session II: Industry Solutions

Room Engineering Building E201, 2:30 – 3:45 pm (Friday)

Session Chair: Foad Hosseinkhanli, Amor Health Services, Inc., Brownsville, Texas, USA

2:30 – 2:55 (Friday)

Edly Ferdin Ramly

Certification Director
EFR Certification
Johor Bahru, Malaysia

Operational Diagnosis - Application of Balance Scorecard and Value Stream Mapping to identify operational improvement opportunities

Abstract: Organizations need to diagnose their current operation performance and identify the opportunities for improvement in order to stay competitive. Based on literature, the common operational diagnosis approaches to identify operational improvements opportunities are: 1) Quality Audit; 2) Business Excellence Assessment; and 3)



Project Selection for Lean and Six Sigma. While Balance Scorecard (BSC) and Value stream Mapping (VSM) are powerful tools in operation management. Both of the tools have been utilized in operational diagnosis. The presentation provides the case studies in integration approaches to apply BSC and VSM in operational diagnosis to identify operational improvement opportunities in quality auditing, and BE Assessment.

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

2:55 – 3:20 (Friday)



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

To control TDS (total dissolved solid) in discharge water of Dyeing

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.

3:20 – 3:45 (Friday)



Foad Hosseinkhanli
Director of Quality Assurance, Performance and Business Improvement
Amor Health Services, Inc.
Brownsville, Texas, USA

Failure Mode and Effect Analysis: A Lean Six Sigma Approach

Mr. Hosseinkhanli is Director of Quality Assurance, Performance and Business Improvement Amor Health Services, Inc. in Brownsville Texas USA. He was General Manager of Almana Trading in Doha Qatar Middle East and responsible for all aspects in creation and implementing of successful growth of new market development and turn- key operation for various products. Mr. Hosseinkhanli was involved with financial negotiation with national and international banking, corporation, private sources and trading organization. Volvo International Development

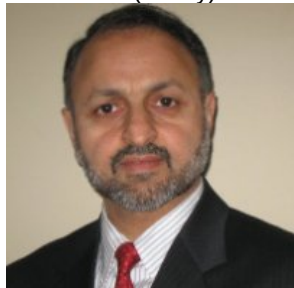
Corporation, Gothenburg Sweden, Marketing Director For The Middle Eastern Countries, UAE, Saudi Arabia, Bahrain, Turkey and Iran. Negotiated and established exclusive franchise agreement and turn- key operation. Did market analysis and feasibility studies for Volvo International in the Middle Eastern countries and increase annual sales in excess of 55%. Chief Industrial Engineer, United Carr, manufacturer of plastic knobs for Automotive Industries, Knoxville Tennessee USA. His education background is: Master of Business Administration from IMMEDE Management Institute in Lausanne Switzerland majoring in financing. Bachelor of Science in Industrial and System Engineering from University of Rhode Island in Kingston Rhode Island USA. Certified Business Analyst from International Profit Association in Buffalo Grove IL USA. Certified Six Sigma Green and Black Belt from Institute of Industrial Engineers. Extra Curriculum Activity: Senior Member of Institute of Industrial Engineers, Senior Member of ASQ and Senior Member of Swedish Method and Time Measurement Language: Fluent in English, Swedish, German, Turkish, Farsi and some Spanish.

Session III: Industry Solutions

Room Engineering Building E201, 4:00 – 5:15 pm (Friday)

Session Chair: Zakir Siddique, Cooper Standard Automotive, Novi, Michigan

4:00 – 4:25 (Friday)



Sardar Asif Khan, M.Sc., MBA, PE, PMP
Manager - World Class Manufacturing (WCM)
Mack Engine Plant
Fiat Chrysler Automobiles (FCA)
Detroit, Michigan

Asif Khan brings over 25 years of engineering and management experience from industry. With strong Lean / World Class Manufacturing experiences, he has helped companies transform from traditional methodologies to Lean Manufacturing. In his current role as WCM lead at the Mack Engine Plant, Asif is responsible for the implementation of WCM, a methodology that focuses on reducing waste, increasing productivity, and improving quality and safety in a systematic and organized approach. Asif's solid experience comes with a strong belief in creating a culture that respects and promotes people's ingenuity and creativity to create trust and bond, which then becomes a potent recipe for collaboration, problem-solving and value-creation. After the re-birth of the Mack Engine Plant, Asif was appointed to establish the WCM organization and lead activities to

implement WCM processes, while achieving financial and audit score results to support the FCA's WCM route map and targets. His role includes strategizing and implementing plans through coaching, auditing and training employees of all levels at the facility.

Previously, Asif led activities as an Industrial Engineering Manager at Mack Engine Plant to launch a new program (V6 pentastar engine). Prior to this role, Asif has had increased responsibility positions including decommissioning an axle plant while transferring the products over to a new facility, as the Industrial Engineering Manager. Asif Khan has helped numerous organizations in translating the WCM methodology into actionable and practical strategies for implementation and integration into factory ways of working. Asif has also worked as a process improvement consultant with the DTE corporate office to stream line their processes.

Asif earned a Bachelor of Science degree in Electrical Engineering (1990), Master of Science degree in Manufacturing Engineering (2001) and Master of Business Administration degree (2007) from the USA. Currently he is pursuing a Doctorate of Manufacturing Systems Engineering at Lawrence Technological University, Michigan (expected completion 2018). Concurrently, he is an Adjunct Professor at the University of Windsor, where he teaches a graduate engineering course on Process Improvement/ Six Sigma methodologies. Asif sits on numerous boards and committees, and loves volunteering for giving back to the engineering profession and community.

Professional affiliations: Member: Professional Engineers Ontario, Vice Chair: Windsor-Essex Chapter Board, Professional Engineers Ontario, Member: Project Management Institute (PMP) and Member: PAC (ME Program Approval Committee, St. Clair College Windsor)

4:25 – 4:50 (Friday)



Moin Baig

CAE Engineer Airbag systems
General Motors Company
Warren, Michigan

Lean Product Development

Mr. Baig's background:

- Experienced mechanical engineer with strong emphasis in non-linear dynamic crash simulation for automotive applications using LS-Dyna. Expert in Hypermesh, PRIMER and ANSA. Experienced in linear static analysis and analytical software code NASTRAN.
- Experience in development, testing and CAE simulation of vehicle occupant restraint systems.
- Innovated restraint system for alleviating chest injury in front impact.
- Knowledge of sheet metal forming. Lean implementation and strategies and product development using LEAN principles and TPS.
- Proficient in six sigma techniques such as Critical to Quality, Voice of Customer, Quality Functional Diagrams and Tradeoff analysis.
- Excellent written and oral communication skills. Developed technical presentations and reports.

4:50 – 5:15 (Friday)



Zakir Siddique, PMP

Senior Program Manager
Cooper Standard Automotive
Novi, Michigan

Zakir Siddique is a Senior Global Program Manager at Cooper Standard Automotive, a Tier-1 automotive supplier company for domestic and foreign OEMs. He has a Master's degree in Mechanical Engineering from University of Texas at Arlington and a Master's degree in Business Administration from Michigan State University. He is a PMI certified PMP. Zakir is responsible for the overall management of assigned customer product development programs. He leads global Program Team to meet timing, quality, finance and product requirements for Cooper Standard and customer systems and processes. Prior to Cooper, Zakir worked as a Senior Program Manager at Johnson Controls and also at TRW Automotive. His interests are project management, new business development, strategic planning, globalization, resource and process optimization and design excellence. Zakir also works as an adjunct lecturer at the Eastern Michigan University in the department of Electrical Engineering Technology.



Saturday (September 24, 2016)

Session IV: Industry Solutions

Room Engineering Building E201, 8:00 – 9:15 am (Saturday)

Session Chair: Joseph Ghislain, Ford Motor Company

08:00 – 08:25 (Saturday)



Abdul Talib Bon and Ooi Shi Jun

Department of Production and Operations Management
Universiti Tun Hussein Onn Malaysia
Raja, Johor, Malaysia

Demand Forecasting for Strategic Resource Planning

Abstract: Demand forecasting is to forecast the future demand so that manager can easily control the production. Demand is defined as a need (Balbo, Gabriel. 2005). From need we will know how much to supply. Therefore, in this study the expected result is that demand forecasting can be effectively used by the manager to make decision in strategic resource planning. This research study objective is to determine how the implementation of demand

forecasting into strategic resource allocation decision can be done and to analyze the issues and develop the new model that will affect the results of demand forecasting and strategic resource planning. To prove this study, the data collection from the firm is needed. The study will be proven from the simulation of the demand forecasting with the collected data from the firm in 4-5 years in order find the best model. The demand data of steel is provided by the Joon Hee MICRON Sdn. Bhd. Nevertheless, Demand Forecasting and Strategic Resource planning are having positive relationship. The hypothesis is accepted. The objectives are successfully achieved and the new model is created. Decisions are made all the time, although sometimes the decision comes unconsciously (Fraga & Anema, 2009). Demand forecasting will be the key to effective decision making process for strategic resource planning.

Biography: Dr. Abdul Talib Bon is Professor of Technology Management in the Department of Production and Operations Management at the Universiti Tun Hussein Onn Malaysia. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration in the Universiti Kebangsaan Malaysia for which he was awarded the MBA. He's bachelor degree and diploma in Mechanical Engineering which he obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom. He had published more 150 International Proceedings and International Journals and 8 books. His research interests include manufacturing, forecasting, simulation, optimization, TQM and Green Supply Chain. He is a member of IEOM, IIE, IIF, TAM, MIM and council member's of MSORSM.

8:25 – 8:50 (Saturday)



Srini Mandadapu, MSE, MBA

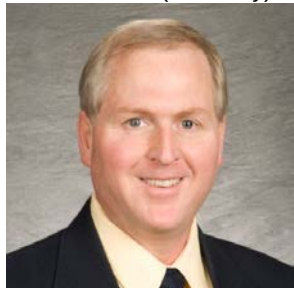
Quality Leader - Product Development
Lead Master Black Belt (MBB)
General Motors

Srini is a "Lead Master Black Belt" working for the General Motors (GM) team and he has 20 years of exceptional experience that led him to hold two U.S. Patents in his diversified portfolio. One of his Patents ('Flexible & removable cargo tie-down hooks' – for Truck Pick up Box – a first-to-market 'patented' product that differentiates GM trucks) is generating \$14 million in profit for his company and a total profit of \$70 million over a five-year program. He is a strategic thinker, innovator, and master problem solver; creator of numerous Best Practices, reusable tools, and methods to improve future designs and optimize processes. In his illustrious career, he coached over 100+ product

development/engineering projects that delivered \$200+ million in annual cost savings. His work means business, and business is his passion. Two-time recipient of GM's "People Make Quality Happen (PMQH) Awards", in recognition of his outstanding contributions to GM quality, and for solving tough quality problems, resulting in significant quality improvement.

Srini has been a Sr. member of an ASQ for over 15 years and holds 'Six ASQ certifications'. He is a "Design for Six Sigma - Master Black Belt (DFSS MBB)" from GM. He also holds an ASQ "Six Sigma Master Black Belt" and "Quality Manager (CMQ/OE)" certifications. On a daily basis, he works strategically with senior management and provides a project mentorship. His duties involve coaching and mentoring Lead Engineers and engineering teams. He is highly rated, and his advice is "no nonsense". Srini also holds MBA from Kelley School of Business, Indiana University and MS in Industrial Technology, Quality Management Major, Eastern Michigan University. Don't miss this opportunity to meet him and listen to what he has to say!

08:50 – 09:15 (Saturday)



Joseph Ghislain

North America Regional Manager & Global Body Exterior & Body Interior
Ford Motor Company - Lean Supplier Optimization (LSO), Global Purchasing
6-Sigma Black Belt, CEM, REM, CSDP, CP EnMS- Industrial, SEP P.V. – Industrial
Dearborn, Michigan

As a Senior/Regional Manager in Ford's Global Purchasing's Lean Supplier Optimization (LSO), Joe leads Ford Motor Company's efforts in partnering with their North American Suppliers to implement Lean Manufacturing and operational efficiency improvements and has LSO global responsibility for the Body Exterior and Interior commodities. He is a 6-Sigma Black Belt and during his 30 years at Ford, has held 11 different positions at 12 plants/locations in 5 different skill teams (Manufacturing, Purchasing, Product Development, SE&SE and Ford

Land) giving him a wealth of automotive, manufacturing and facility experience. Prior roles include: Stamping/Sheetmetal Manuf. Optimization Mgr.,

Business Strategy Mgr., Body Area Mgr., Manufacturing Planning Mgr., Manufacturing/Productivity Optimization Mgr., Manager-Global Energy Efficiency Programs Mgr., Environmental Engineer and Power House Chief Engineer.

Along with knowledge in Lean Manufacturing, DFM, Bill of Process ToC/TPM and facilities, Joe is recognized as a Subject Matter Expert in Energy, Energy Management and Compressed Air System. Serving on numerous national/international committees and boards including: Compressed Air Challenge, US Council for Energy Efficient Manufacturing, ISO 50001 US Technical Advisory Group (TAG), ANSI-GTEEMC, ASME -Industrial System Energy Assessment Standards and the Institute for Energy Management and has published many technical papers in AEE, ACEEE, ECEE, SAE, SME, Compressed Air Best Practices and Plant Services. He also serves as an instructor for the Compressed Air Challenge and Department of Energy. Joe's efforts in operational efficiency and energy improvement have yielded several hundred million dollars' worth of savings to Ford Motor Company and its suppliers.

Session V: Industry Solutions

Room Engineering Building E201, 11:30 am – 12:45 pm (Saturday)

Session Chair: Dr. Mehran Doulat, Razak School of Engineering and Advanced Technology, UTM Kuala Lumpur, Malaysia

11:30 – 11:55 (Saturday)



Foad Hosseinkhanli

Director of Quality Assurance, Performance and Business Improvement
Amor Health Services, Inc.
Brownsville, Texas, USA

Failure Mode and Effect Analysis: A Lean Six Sigma Approach

Mr. Hosseinkhanli is Director of Quality Assurance, Performance and Business Improvement Amor Health Services, Inc. in Brownsville Texas USA. He was General Manager of Almana Trading in Doha Qatar Middle East and responsible for all aspects in creation and implementing of successful growth of new market development and turn- key operation for various products. Mr. Hosseinkhanli was involved with financial negotiation with national and international banking, corporation, private sources and trading organization. Volvo International Development Corporation, Gothenburg Sweden, Marketing Director For The Middle Eastern Countries, UAE, Saudi Arabia, Bahrain, Turkey and Iran. Negotiated and established exclusive franchise agreement and turn- key operation. Did market analysis and feasibility studies for Volvo International in the Middle Eastern countries and increase annual sales in excess of 55%. Chief Industrial Engineer, United Carr, manufacturer of plastic knobs for Automotive Industries, Knoxville Tennessee USA.

His education background is: Master of Business Administration from IMMEDE Management Institute in Lausanne Switzerland majoring in financing. Bachelor of Science in Industrial and System Engineering from University of Rhode Island in Kingston Rhode Island USA. Certified Business Analyst from International profit Association in Buffalo Grove IL USA. Certified Six Sigma Green and Black Belt from Institute of Industrial Engineers.

Extra Curriculum Activity: Senior Member of Institute of Industrial Engineers, Senior Member of ASQ and Senior Member of Swedish Method and Time Measurement Language: Fluent in English, Swedish, German, Turkish, Farsi and some Spanish.

11:55 – 12:20 (Saturday)



Mehran Doulat, BSc., MEM, MQM, EFQM, Ph.D.

Senior Research Fellow
Genichi Taguchi Center for Quality and Sustainability
Razak School of Engineering and Advanced Technology
UTM Kuala Lumpur
Kuala Lumpur, Malaysia

Mehran Doulat Abadi is currently a Visiting Senior Research Fellow at University of Technology Malaysia (UTM). He has special interest in examination issues relating to Multi Criteria Decision Making (MCDM), Engineering Management and business excellence including the use of the European Foundation for Quality Management (EFQM) Excellence Model. He holds double Master's Degrees in Engineering Management with specialization in Quality Management and a Graduate Certificate in Project Management from University of Wollongong, New South Wales, Australia. He has written numerous papers on the topic of quality management and business excellence based on his research and consultative works. His papers have been published in refereed scientific journals as well as international conferences. He is a Registered Professional with Australian Organization for Quality (AOQ) and a senior member of the American Society for Quality (ASQ). He is a Certified European Excellence Assessor in Dubai Quality Award (DQA) program since 2007. He was recently engaged as a senior project coordinator in the Mystery Shopper Service Excellence Project under the directive of Prime Minister's Office (PMO) in Dubai, UAE.

12:20 – 12:45 (Saturday)



Dr. Ishtiaq Hussain

Manufacturing Process Lead
General Motors Corporation
World Head Quarters
Pontiac, Michigan

Dr. Muhammad Ishtiaq Hussain is Adjunct Faculty in Lawrence Tech University. He earned his Doctoral of Engineering in Manufacturing Systems (DEMS) and Master of Engineering in Manufacturing Engineering (MEMS) Degrees in May 2008 from Lawrence Tech University, Michigan, USA. He also earned Master of Science in Quality from Eastern Michigan University in 2003. Dr. Hussain is a certified DFSS Black Belt from General Motors

University and CMI from ASQ. He is currently working in General Motors Corporation Headquarter in Powertrain division in USA. Dr. Hussain has expert level knowledge in the following disciplines.

- Design of Experiment (DOE)
- Statistical Process Control (SPC)
- Geometric Dimensioning and Tolerances (GD&T)
- Design for Six Sigma (DFSS)
- Manufacturing Processes & Technology
- Gauging and Inspection (GR&R)
- Process Quality Analysis
- Machining Expert and MQL (green manufacturing) Expert

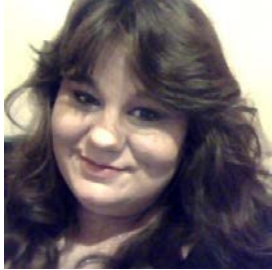
Dr. Hussain is a source of knowledge to all the GM machining plants. He has launched many New and major GM Powertrain engine programs. Dr. Hussain authored and published several papers in machining and measurement systems.

Session VI: Industry Solutions

Room Engineering Building E201, 2:30 – 3:45 pm (Saturday)

Session Chair: Dr. Mohammad Hijawi, Fiat Chrysler Automobiles (FCA), Auburn Hills, Michigan

2:30 – 2:55 (Saturday)



Michelle (Matson) Hackett

CAD Production Manager

RGIS

Auburn Hills, Michigan

Michelle Hackett is a results-driven, business professional with a proven record of success within engineering environments; experienced in taking large conceptual projects, dividing them into components, establishing plans and a critical path, and then delivering projects on time. Her professional work experience consists of: delivering design and engineering information that is precise, unquestionably communicated, and complete, then teaching others to do this as well. This includes performing needed engineering calculations, precision measuring for reverse engineering or quality reasons, applying drafting techniques for creating layouts, 3D models, assemblies, and details. Additional responsibilities included: preparing of bills of materials, completing engineering change orders, tracking revisions, order entry, sales quoting, purchasing of materials, creating production hot lists, drawing file, and database maintenance.

Experiences:

- CAD Production Manager – RGIS
- CAD Professor, Oakland Community College
- CAD Professor, Macomb Community College
- Past Chair SME Detroit Chapter One
- 3D CAD Designer, Oxbow Machine Products Inc.
- Application Engineer, Studica, Inc.
- Computer Drafting & Design Instructor, ITT Technical Institute
- CAD Designer, FASTUBE, LLC

Education:

- University of Phoenix - Livonia Campus, Master's, Business Administration, 2006 – 2008
- University of Phoenix - Livonia Campus, Bachelor's, Business Management, 2003 – 2006
- Schoolcraft College, 3 Associates Degrees (Computer Assisted Manufacturing 2002, Computer Aided Design Tool Design 1997 and Computer Aided Design Mechanical Design 1993)

2:55 – 3:20 (Saturday)



Dr. Mohammad Hijawi

Technical Fellow - Powertrain Quality Reliability Engineering

Fiat Chrysler Automobiles (FCA)

Auburn Hills, Michigan

Mohammad Hijawi is a Global Reliability Technical Fellow in the Powertrain Quality and Reliability group at FCA US LLC. He has 28 years of engineering, research, and managerial experience specializing in Quality and Reliability. He received the doctorate in Mechanical Engineering from Wayne State University. His main areas of interest are proactive reliability, statistics, reliability demonstration, accelerated life testing, reliability growth, problem solving, warranty forecasting and Design for Six Sigma. He is a certified DFSS master black belt. He authored multiple professional publications on the topics of reliability, statistics, vibrations, and Six Sigma.

3:20 – 3:55 (Saturday)

**Muhammad Arif Islam**

Functional Safety Manager
Braking Engineering
ZF TRW
Active & Passive Safety Technology
Livonia, Michigan

Muhammad Arif Islam is a Functional Safety Manager of Braking Engineering at ZF TRW, Livonia, Michigan. He was a System Safety Engineer and System Engineer at TRW from 2004 to 2012. Mr. Islam was a Reliability Engineer at Ford Motor Company for four years and Reliability Engineer at General Motors Company for one year. He was an Engineer at Kamax LP.

Mr. Islam is highly motivated and result-oriented professional with effective interpersonal communication and strong leadership skills. He has an extensive background in Automotive Functional Safety, System Engineering and Product Development for over 16 years.

Mr. Islam has received his BS in Mechanical Engineering from Bangladesh University of Engineering and Technology (BUET), Dhaka and MS in Industrial Engineering from Wayne State University.

Session VII: IEOM Women in Industry and Academia Forum

Room Engineering Building E201, 4:00 – 5:15 pm (Saturday)

Session Chair: Dr. Rashmi Jha, Guru Gobind Singh Indraprastha University, New Delhi, India

Dr. Galia Novakova Faculty of Mathematics and Informatics Sofia University Bulgaria		Dr. Rashmi Jha Associate Professor and Program Coordinator of Master of Computer Applications Gitarattan International Business School Guru Gobind Singh Indraprastha University New Delhi, India	
Dr. Chee-Ming Chan Associate Professor and Deputy Dean (Academic and Research) Centre for Graduate Studies Universiti Tun Hussein Onn Malaysia Batu Pahat, Johor, Malaysia		Ms. Priyadarshani Premarathne Lecturer Department of Sociology University of Peradeniya Peradeniya 20400, Sri Lanka	

Dr. Eng. Galia Novakova, Quality Engineering Professional

Dr. Eng. Galia Novakova is Asst. Prof. in the Faculty of Mathematics and Informatics at Sofia University, Bulgaria. She is taking part in various research groups and she performed postdoc at Polytechnic University of Milan, Italy during 2003-2005, at CNR – National Research Center in Milan, Italy during 2006, University of Missouri Science and Technology, Dept. of Engineering Management, USA during 2010-2011. She has also participated in various scientific conferences presenting articles (Dubai, Hong Kong, Orlando, Kuala Lumpur, etc.) and she has been a session chair in them.

Her education background is:

- PhD in Industrial Engineering and Management, in particular in Statistical Process Control, Polytechnic University of Torino and University of Parma (consortium program), Italy.
- MSc degree in Information and Management Technologies, Chemical-Technological and Metallurgical University, Sofia.
- MSc degree in Quality Management and Statistical Process Control, Polytechnic University of Torino, Italy and Chemical-Technological and Metallurgical University, Sofia.

Dr. Eng. Galia Novakova Nedeltcheva has sound practical experience – she was appointed as advisor to the Minister for development of e-Government at the Council of Ministers in Republic of Bulgaria in 2013. She was also a manager of IT projects (Methodia, Bulgaria and TXT e-solutions, Milan) and a consultant in quality management and statistical process control in Italy (MAP Ltd., Saronno, Italy).

Sunday (September 23, 2016)

Session VIII: Industry Solutions

Room Engineering Building E201, 8:00 – 9:15 am (Sunday)

Session Chair: Gregg Young, Young Associates, Inc., Midland, MI



08:00 – 08:25 (Sunday)

Bob Doering, MBA

Quality Engineering Professional

Expert in CorrectSPC for Precision Machining - Trainer, Consultant

Lagrange, Ohio

Bob Doering has been in the quality field for over 20 years. He is currently a quality engineer for an automotive component manufacturing firm, as well as a consultant in SPC, Metrology and Quality Concepts training. He holds associates degrees from Lorain County Community College of Elyria, Ohio and The University of Akron of Akron, Ohio; BA in Business and MBA in Systems Management from Baldwin-Wallace College, Berea, Ohio.

08:25 – 08:50 (Sunday)



Walter Schwartz

Sustainability & Business Strategy Supervisor

Ford Motor Company

Manufacturing Analytics: The State of Implementation across Industries

Mr. Schwartz is a Sustainability & Business Strategy Supervisor at Ford Motor Company. He has the following areas of expertise and interests:

Manufacturing

- Ford Blackbelt Exam Passed
- Seven years of manufacturing process engineering in an aluminum transmission plant

Corporate Support

- Supervisor of Fuel economy team to lead CAFE (Corporate Average Fuel Economy) efforts
- Supervisor of Business, Strategy, and Sustainability at the Research level
- Data analytics supervisor

He has supervised sustainability and strategy efforts including fuel cell program to ensure future product portfolio remains competitive with other OEMs. Also Mr. Schwartz has coordinated business issues including preparation of high level management documents for monthly and quarterly review. Mr. Schwartz received bachelor's degree in industrial engineering from University of Toledo and master's degree in manufacturing systems engineering from University of Michigan-Dearborn.

08:50 – 09:15 (Sunday)



Gregg Young

President and Founder

Young Associates, Inc., Midland, MI

"Lost Secrets of the Origin of Six Sigma"

Bio: Gregg Young is President and Founder of Young Associates, Inc. (<http://youngassocinc.com>). He has worked with large corporations and small businesses helping them to solve problems, improve quality, increase profits, and develop successful new products. Gregg has spent over 40 years solving problems, leading teams, and teaching problem solving skills. He experienced both successes and frustrations, so he studied dozens of processes searching for best practices he could add to his clients' processes so they would deliver bigger results faster. When he discovered that best practices do exist, it sparked his passion to share this knowledge, so that anyone can solve problems as effectively as Sherlock Holmes solved crimes. He is the author of three books focused on upgrading business processes by adding convergent, observation-based methods to existing processes. His latest book is Reasoning Backward: How Sherlock Holmes Can Make You a Better Problem Solver. It adapts these techniques

for students as well as businesses, providing everyone with the skills they need to solve problems effectively and create a competitive advantage in the global marketplace. His most recent work has been the development of Active Time Profiles, a graphic tool to accelerate and focus cycle time reduction in any system. Young has a B.A. in Chemistry from Rice University.

Session IX: Industry Solutions

Room Engineering Building E201, 2:30 – 3:45 pm (Sunday)

2:30 – 2:55 (Sunday)

**Abdul Talib Bon and Silvia Firda Utami**

Department of Production and Operations Management
Universiti Tun Hussein Onn Malaysia
Johor, Malaysia

Sukono

Department of Mathematics, Faculty of Mathematics and Natural Sciences
Universitas Padjadjaran
Bandung, Indonesia

Modeling Analytical Hierarchy Process and Fuzzy Inference System Tsukamoto for Crude Palm Oil Production Planning

Abstract: Decision making has become a routine activities carried out by the production manager at Sindora Palm Oil Mill. The decision making process does not always run smoothly, sometimes arisen obstacles because uncertainty and vagueness. The obstacles come from various factors of production such as capital, labor and raw materials and machine, and as well as other factors such as, suppliers, inventory and market demand. These obstacles can be cause major problems if not dealt with quickly and accurately. One of the problems that will arise is the decline in production quantity. Therefore, this study intended to help the company to determine the optimal amount of crude palm oil production and to determine the order of priority factors influencing the decline in production quantity and also apply the Analytical Hierarchy Process (AHP) and Fuzzy Inference System Tsukamoto (FIS Tsukamoto) methods in the production planning the company to assist and facilitate the decision-makers in making decisions. FIS Tsukamoto is a method for decision making that using monotone reasoning. The data input obtained from documentation like inventory, demand and production data. In addition, AHP also is a method for decision making and the data obtained from interviews and questionnaire. The results of this study is the total production and inventories of Crude Palm Oil by the year 2014 turned into optimal and stable; profit is higher than previously; then, the plot data also showed that the total production in 2014 is not stable because there are still decreased. Then, the main factors affecting the decline of total production is internal factors. The Order of priority of the internal factors is factor capital, labor, raw materials and technology & machines. This study is particular suited if used in crude palm oil company like Sindora Palm Oil Mill, because give more benefit to the company.

Biography: Dr. Abdul Talib Bon is Professor of Technology Management in the Department of Production and Operations Management at the Universiti Tun Hussein Onn Malaysia. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration in the Universiti Kebangsaan Malaysia for which he was awarded the MBA. He's bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom. He had published more 150 International Proceedings and International Journals and 8 books. His research interests include manufacturing, forecasting, simulation, optimization, TQM and Green Supply Chain. He is a member of IEOM, IIE, IIF, TAM, MIM and council member's of MSORSM.

2:55 – 3:20 (Sunday)

**Ahmed Al-Jabr, CMBB**

President, Saudi IEOM Society
Dhahran, Saudi Arabia

"Challenges and Opportunities of Lean and Six Sigma for Saudi Industries"

Ahmed Aljabr is a president of IEOM Society – Saudi Arabian Chapter, as quality engineer and Six Sigma Mater Blackbelt Certified, his experience span most industries and operational areas including working in different successful project, such as working win the International Automotive Components (IAC) to install a solar photovoltaic panel system within their facility, Whitlam Label Company (WLC) to layout the travel distance to minimize the non-value added transportation time on their factory, and Shiloh Industries Inc. through a Six Sigma project with an annual cost savings of over \$500,000, figured how the process was mapped, characterized, analyzed, improved and controlled, and explore which tools were used to quantify the amount of variation within the process as well as the cost of that variation.

He is an expert in the areas of Lean Six Sigma, Continues Improvement, Quality Management, Lean Manufacturing, Operational Excellence, Optimization, Strategy, Project Management, Supply Chain Management, Public Relation, and Global Leadership. He is an active member of SAE, IIE, ASQ, ASME, LEI, IEOM, and SME. He was a president of the Saudi Student Union at LTU, President of Arab American Association of Engineers and Architects (AAAEA), he received an Exemplary Leadership Award, Best leader of the year from Lawrence Technological University, and Outstanding Leadership Award from Saudi Arabian Cultural Mission, Saudi Embassy at Washington D.C. He has BS in Mechanical Engineering, MS in Manufacturing System Engineering, MS in Engineering Management, and he is PhD Candidate Manufacturing System Engineering at Lawrence Technological University.

3:20 – 3:45 pm (Sunday)



Ishak Zaman
Product Development Engineer
Ford Motor Company

Offshore and Onshore Wind Farming in Bangladesh and Developing Countries

Ishak Zaman is working as a Product Development Engineer at Ford Motor Company. He has worked as design and release engineer of Restraints systems (Steering Wheel, Driver Airbag, Seat belts, Side Airbag, Side Air Curtain, Passenger Airbag) led restraints engineering cost attack team, led vehicle cost attack engineering team for Focus Seat & Restraints, durability engineer and vehicle launch management engineer. Mr. Zaman earned Master of Science in Mechanical Engineering from Oklahoma State University and Bachelor of Science in Mechanical Engineering from Bangladesh University of Engineering and Technology. Mr. Zaman is serving as a member of the Board of Director of IEOM Society. He is awarded with a US Patent and has pending US patent

applications.

Session X: Industry Solutions

Room Engineering Building E201, 4:00 – 5:15 pm (Sunday)

Session Chair: Rasheed Khan, Hyundai-Kia American Tech Center, Ypsilanti, Michigan

4:00 – 4:25 pm (Sunday)



Gregg Young
President and Founder
Young Associates, Inc., Midland, MI

"Using Active Time Profiles to Jumpstart Lean and Cycle Time Improvement"

Gregg Young is President and Founder of Young Associates, Inc. (<http://youngassocinc.com>). He has worked with large corporations and small businesses helping them to solve problems, improve quality, increase profits, and develop successful new products. Gregg has spent over 40 years solving problems, leading teams, and teaching problem solving skills. He experienced both successes and frustrations, so he studied dozens of processes searching for best practices he could add to his clients' processes so they would deliver bigger results faster. When he discovered that best practices do exist, it sparked his passion to share this knowledge, so that anyone can solve problems as effectively as Sherlock Holmes solved crimes. He is the author of three books focused on upgrading business processes by adding convergent, observation-based methods to existing processes. His latest book is Reasoning Backward: How Sherlock Holmes Can Make You a Better Problem Solver. It adapts these techniques

for students as well as businesses, providing everyone with the skills they need to solve problems effectively and create a competitive advantage in the global marketplace. His most recent work has been the development of Active Time Profiles, a graphic tool to accelerate and focus cycle time reduction in any system. Young has a B.A. in Chemistry from Rice University.

4:25 – 4:50 pm (Sunday)



Nirav Sheth
Manufacturing Engineer
Eberspaecher North America
Brighton, Michigan

Nirav Sheth is a Manufacturing Engineer at Eberspaecher North America, Brighton, Michigan. He has completed Master of Science Industrial Engineering from Lawrence Technological University, Michigan, USA. He holds a Bachelor of Engineering in Mechanical Engineering from Pune University, India. He has experience in design and quality engineer at Ploytech Cooperation, Mumbai India. He has published Proceeding in Industrial Engineering & Operation Management. His research Interest Includes manufacturing, optimization, productivity, simulation (Arena), Microsoft Project Management, Minitab, Six Sigma and 3D Modeling (CATIA, Pro/E, Unigraphics, AutoCAD).

4:50 – 5:15 pm (Sunday)



Dr. Taufiqul Islam
Operations Manager
IEOM Society International
Canton, Michigan

Dr. Taufiqul Islam is an operations manager of Industrial Engineering and Operations Management (IEOM) Society International, Michigan, USA. He is managing IEOM membership, conference activities, editing newsletter, arranging tour and coordinating training activities. He received B.Sc. (Agricultural Engineering) from the Bangladesh Agricultural University in 1981 and M.S. (Agricultural Engineering) from the Newcastle University, United Kingdom, in 1984. He has earned Ph.D. degree in Bio-Systems Engineering from the Michigan State University in 2004.

In 1981 Dr. Islam joined in the Department of Agricultural Engineering, Bangladesh Rice Research Institute (BRR) as Scientific Officer and became Senior Scientific Officer in 1990 and Principal Scientific Officer in 1996. He has modeled and investigated experimentally Seed Corn Drying in a commercial seed processing facility. The model was used to assess the effect of the main operating parameters on the dryer capacity and energy cost. Dr. Islam served in different capacity (as a Research Assistant, Research Associate, Software Engineer, QA Tester) in Tumblewind Corporation, Avtrex Inc., and AdeptMax Corporation.

Dr. Islam attended industrial training in the field of Agricultural Machinery Testing (IAM, BRAIN, Japan) and Principles of IC Engine Operation (BADC, Bangladesh). He was awarded Agricultural Research Management Program scholarship (1998), and Japan International Cooperation Agency scholarship, *Agricultural Machinery Testing* (1992). Dr. Islam has also published number of papers in different journals around the World. Dr. Islam has attend seminars and conferences. He is a member of IEOM Society.

5:15 – 5:50 pm (Sunday)

Jack He

Vice President

MCC (Xiang Tan) Mining Equipment LLC

Xiangtan City, Hunan

China

Submissions Received from Countries and Territories

Algeria	Indonesia	Pakistan
Australia	Iran	Philippines
Bangladesh	Italy	Qatar
Brazil	Japan	Saudi Arabia
Bulgaria	Kenya	South Africa
Canada	Korea	Sri Lanka
China	Kuwait	Taiwan
Colombia	Libya	Thailand
Denmark	Malaysia	Turkey
Egypt	Mexico	United Arab Emirates
Finland	Morocco	United Kingdom
France	Nigeria	United States
Germany	Norway	West Bank and Gaza
India	Oman	Zimbabwe

IEOM Student Chapter at Al Akhawayn University, Ifrane Morocco

FACULTY ADVISOR:

Dr. Ilham Kissani

Engineering & Management

Science

School of Science & Engineering





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Realize innovation.

GD&T (Geometric Dimensioning and Tolerancing) Workshop

September 23, 2016 (Friday), 8:00 am – 5:00 pm

Lawrence Tech Campus, Southfield, Michigan

Lear Auditorium, T429 – Architecture Building

Workshop Chair: Saso Krstovski, Ford Motor Company

PROGRAM

7:00 - 8:00 am Continental Breakfast

8:00 - 8:20 am **GD&T ASME Standards and Fundamentals - Saso Krstovski, Ford Motor Company**

8:20 - 8:40 am **Ford Corporate GD&T Training and how engineers and designers work together on daily basis on GD&T application and drawing including standards, Rochelle Courson, Product Design Senior, GD&T and Ford Standards - Global Engine Engineering Department, Ford Motor Company**

8:40 - 9:30 am **GD&T Fundamental and Rules - Dr. Joseph Ogundu, President and CEO – Emerald Global Consulting Inc., West Bloomfield, Michigan, USA**

9:30 - 11:00 am **Opening Keynote - Carlo Materazzo, Head of World Class Manufacturing (WCM), FCA – Global, Fiat Chrysler Automobiles (FCA), Auburn Hills, Michigan**

11:00 am - 12:00 pm: **GD&T Implementations Issues in Design and Manufacturing**
Mohammad Maqsood Haq, Metrology Supervisor, Sr. Dimensional Engineer, Fiat Chrysler Automobiles (FCA), Jefferson North Assembly Plant, Detroit, Michigan

12:00 -1:00 pm: **GD&T with Hands-on Practices**
Brian P. Heersink, DM/GDT/Gauging CAD Primary, CAD/CAE Department, TDE, Ford Motor Company

1:00 - 2:30 pm - **Lunch Keynote**
Dr. Jeffrey Abell, GM Technical Fellow, Lab Group Manager, Manufacturing Systems Research, General Motors Global Research and Development, Warren, Michigan (Lunch Provided)

2:30 - 3:15 pm **GD&T Experiences**
Mark E. Foster, President, Applied Geometrics, Inc. (AGI), Harwood Heights, Illinois

3:15 - 3:45 pm **Gaging and Inspection Experiences on GD&T**
Jim Beary, NAO Inspection Technologies Manager & Dimensional Engineering Instructor, Benteler Automotive, Grand Rapids, Michigan

3:45 - 4:15 pm **GD&T Experiences and Implementation Issues**
Tom Geiss, Lead Course Developer – GD&T Basics, ASME Senior GD&T Certified Professional, Pareto Learning LLC, South Carolina

4:15 - 4:45 pm **GD&T Experiences**
John-Paul Belanger, Certified Sr. GD&T Professional, President, Geometric Learning Systems, Detroit, Michigan

4:45 - 5:15 pm **Tolerance Stack up**
Dr. Ahad Ali, Associate Professor, Director of BSIE and MSIE Programs and Director of Smart Manufacturing and Lean Systems Research Group at Lawrence TechStudies - Industry Speaker

TOPICS

- | | |
|--|---------------------------------------|
| • Symbols, rules and principles - ASME Y14.5-2009 Standard | • Datum Features |
| • Fundamentals of GD&T | • Flatness |
| • Tolerance Stack-Up Analysis | • Material Conditions (MMC, LMC, RFS) |
| • Statistical Tolerancing | • Parallelism |
| • Angularity | • Perpendicularity |
| • Circular Runout | • Position |
| • Circularity (Roundness) | • Profile |
| • Concentricity | • Runout (Circular / Total) |
| • Cylindricity | • Straightness |
| | • True Position |
-

Speaker Bios

**Saso Krstovski**

Test Engineer
Ford Motor Company

Saso Krstovski is working at Ford Motor Company as a Test Engineer since 2010. Mr. Krstovski is detail oriented and data-driven engineer with over 20 years of manufacturing experience. He is equipped with diversely skilled at problem identification and resolution within in early stages to avoid time/cost expenditures. His expert level skills are in information technology, engineering, test and manufacturing systems. His background ranges from supervision to engineering. Mr. Krstovski held several different engineering discipline rolls within Ford. He has extensive six sigma knowledge inside and outside of Ford organization. Mr. Krstovski collaborated with education sector on manufacturing systems projects and ideas on several occasions. In the process of pursuing an advance

degree in manufacturing systems. He is a doctoral student at the Doctor of Engineering in Manufacturing Systems (DEMS) at Lawrence Technological University. Mr. Krstovski has Master in Electrical Computer Controlled Systems from Wayne State University. He has published papers and scientific articles.

**Rochelle Courson**

Product Design Senior
GD&T and Ford Standards
Global Engine Engineering Department
Ford Motor Company

Rochelle Courson is a design Senior whose main function is GDT and Ford Standards in the Global Engine Engineering department at Ford Motor Company. She has over 30 years' experience in drafting, design & CAD. She is currently Ford's representative on the ASME Y14.5 Dimension and Tolerancing standard, Y14 Main Committee, Y14.36 Surface Texture Symbols, and is secretary for a new ASME Measurement Reporting standard that is still in the development phase. She is also involved in several other ASME cross-committee Joint Advisory teams. In addition to her involvement with the ASME standards, she is also works on the development of Ford

corporate GDT training materials, and consults with engineers and designers daily on GDT application and drawing related standards issues. She has a BS in Industrial Administration and a Leadership Certification from Central Michigan University.

**Brian Heersink**

DM/GDT/Gauging CAD Primary
CAD/CAE Department
Ford Motor Company

Brian Heersink has been working for Ford Motor company for 22 years. He began working seriously with GD&T while on a 6 year assembly plant assignment in Virginia. Currently, Brian works in the CAD/CAE department of Transmission/ Driveline Engineering in Livonia, Michigan. He is a primary, working in Dimensional Management Analysis, with special focus on GD&T, training and Gauging issues. Brian completed an AA degree at Macomb Community College and BA at Dordt College in Iowa. He is originally from Canada. Having lived more than half his life in the US, he has lost his "eh?" and doesn't expect to find it back.

**Mohammad Maqsoud Haq**

Metrology Supervisor, Sr. Dimensional Engineer
Fiat Chrysler Automobiles (FCA)
Jefferson North Assembly Plant
Detroit, Michigan

Consummate Manufacturing strategist, Prolific GD&T data analyzer and Systems integrator, Acknowledged Companywide for ground breaking efforts in Large scale Manufacturing subsystem launching that delivers throughput and propels the Six Sigma initiative. Vast Experience spans Metal Stamping & Die Tooling, Injection Molding, Complex multi-models manufacturing in a common platform under target cost & timing in the "Big 3" arena.

- ~Shainin Reactive Black Belt Certified
- ~Product Creation, Dimensional Verification Analysis, Process Optimization, Assembly Integration and New Program Launch:
- ~Assembly Design & Manufacturing Feasibility Specialist:
- Sheet Metal stamping and Fabrication Specialist:
- ~Lean Manufacturing Principle implementation with Six Sigma.
- ~New Program management from design to launch under target cost:
- ~Program Management, Supplier Quality and Vendor cost and manpower management:

Specialties: Shainin Red X ~ Black Belt, Leica Laser Tracker Programmer, CMM programmer, Auto, Aero, Nanotechnology, Hybrid Tech, Solar cell, FMS, ProEngineer and AutoCAD, Assembly and Fixture Design, Advanced GD&T, FEA, CP-CPk, Process, CI, ANOVA, Allen Bradley PLC, Kaizen, Ishikawa, Hoshin and Taguchi Methods, Robotic Systems, NPI, Process Optimization. DFA/DFM, Lean Principle with Six Sigma, Kaizan, System Integration, Analytical Modeling, CAD & CAE Software, Benchmarking, Budgeting, Statistical Analysis, Process Capability, DVP, PPAP, DOE, APQP,



Dr. Joseph M. Ogundu, 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, Suncor Energy Inc, Nobel Automotive, Finer Cabinetry & Woodwork, Bend River Sash Door Company, Morgan Fine Finishing, Magna Corporation, Axis Manufacturing, Trim-X Technologies, Oakland University and Lawrence Tech University.

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

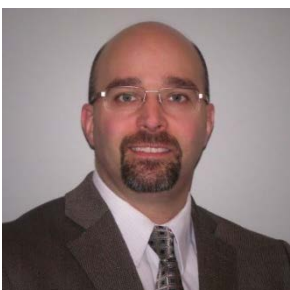


Mark E. Foster
President
Applied Geometrics, Inc. (AGI)
Harwood Heights, Illinois

Mr. Foster is a mechanical engineer with over 30 years of experience in design, quality, and Geometric Dimensioning and Tolerancing (GD&T). He is currently the President of Applied Geometrics, Inc. AGI is a technical education and consulting firm dedicated to providing support and high quality education and training services that improve a company's competitive position, and profitability.

Mark is a member of the ASME Y14.2 committee and participates regularly in the ASME Y14 meetings throughout the country. Mark has held Management positions in Quality Assurance, Manufacturing Engineering, and Design Engineering and is the chief instructor for AGI. He has provided GD&T training for hundreds of individuals and companies, such as Harley-Davidson, Delco Electronics (Delphi), Nissan, Briggs & Stratton, Woodward Governor Company, Dart Container Corporation, Skil-Bosch Power Tools and more, in GD&T, SPC, ISO/QS-9000, and Print Reading, as well as Train-the-trainer classes.

Mark was a charter member of the Geometric Dimensioning and Tolerancing Professional (GDTP) Senior Level examination. He passed the first ever GDTP Senior Level exam administered by the ASME, and is Senior Level Certified (GDTP #S-0114) in accordance with the ASME Y14.5.2 Standard for the Certification of Geometric Dimensioning and Tolerancing Professionals. Unlike many GD&T instructors, Mark has actually applied his training to real-world designs on a regular basis during his extensive experience from the design, manufacturing and quality perspectives. This experience and ongoing practical application provides him with the unique ability to relate the common problems that inevitably arise between these groups during the production of a part.



Jim Beary, PMP, GDTP-S, SSBP
NAO Inspection Technologies Manager & Dimensional Engineering Instructor
Benteler Automotive
Grand Rapids, Michigan

Mr. Beary has over 20 years of experience in the development, engineering, and project management of check fixtures and functional gages that are physical representations of the concepts and boundaries defined by geometric dimensioning and tolerancing. Jim has conducted CAD design, gage development, and GD&T training in companies ranging from regional tool and gage shops to global and fortune 500 companies in the automotive, medical, oilfield services, robotics, defense, fire protection, and tooling industries.

He holds Senior GDTP (Y14.5) Geometric Dimensioning and Tolerancing Professional Certification through the American Society of Mechanical Engineers, in addition to being a certified Project Management Professional (PMP) through the Project Management Institute. He also attained

Competent Communicator status through Toastmasters International to enhance his presentation skills while completing classes towards his Bachelor's degree at Southern Illinois University, Carbondale College of Engineering.

Specialties: Team Development, Standards Development, Process Development, Project Management, CAD Design, Blueprint Reading, GD&T Fundamentals, GD&T Advanced Concepts, Functional Gage Design, Part and Assembly Inspection, and Tolerance Stackup Analysis.



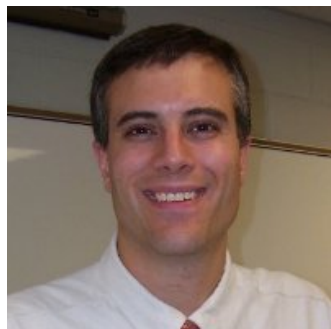
Tom Geiss

Lead Course Developer – GD&T Basics
ASME Senior GD&T Certified Professional
Pareto Learning LLC
South Carolina

Tom Geiss is the owner of Pareto Learning LLC and the lead course developer of GD&T Basics. He has worked as an automotive/design engineer for ten years with several companies, including BMW Manufacturing and ZF Transmissions. Throughout his career, he has actively applied concepts of Geometric Dimensioning and Tolerancing to the automotive and mechanical fields to improve functional communication of design concepts. Knowledge of GD&T is imperative to success in most of the mechanical/industrial fields. However, Tom believes that for far too long GD&T training has been too complicated and inaccessible to many. This led him to develop a GD&T resource website and an online training course dedicated to improving this important knowledge in the mechanical world: www.gdandtbasics.com.

Tom has collaborated with other dedicated engineers to create an amazing resource to help others learn the concepts of GD&T easily and effectively. He strongly believes that the best way to learn and apply GD&T is to show how it is actually used in real world applications, not just how it is listed in the standards. GD&T can save time, money and headache by focusing on what is functionally necessary for a product and design. Tom has seen proof that those who know how to interpret and apply GD&T correctly are much more adept at making a positive impact in their technical work.

Tom has received a BS in Mechanical Engineering from Clarkson University and is an ASME Senior-Level Certified GD&T Professional.



John-Paul Belanger

Certified Sr. GD&T Professional
President, Geometric Learning Systems
Detroit, Michigan

John-Paul Belanger is a Certified Sr. GD&T Professional. He is President of Geometric Learning Systems, Detroit, Michigan. As president and principal consultant, Mr. Belanger works with companies to train engineers and manufacturing personnel in the proper use of geometric tolerancing (GD&T), and how it should be interpreted on prints. He teaches seminars (both comprehensive and overview) in this topic, and also serve as a consultant in GD&T and FMEA as new designs are released. Mr. Belanger is an adjunct engineering instructor at Omnex Inc., Ann Arbor, Michigan. He is offering GD&T and other technical training to clients of Omnex, a global provider of quality and engineering services. Mr. Belanger was a senior engineer at General Physics. He earned his BS in Aerospace Engineering from University of Michigan with specialization in aircraft design and aviation safety.



Dr. Ahad Ali

Associate Professor
Director – Bachelor of Science in Industrial Engineering (BSIE)
Director – Master of Science in Industrial Engineering (MSIE)
Director – Smart Manufacturing and Lean Systems Research Group
A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University
Southfield, Michigan

Ahad Ali is an Associate Professor, and Director of Master of Engineering in Manufacturing Systems and Master of Science in Industrial Engineering in the A. Leon Linton Department of Mechanical Engineering at the Lawrence Technological University, Michigan, USA. He earned B.S. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh, Masters in Systems and Engineering Management from Nanyang Technological University, Singapore and PhD in Industrial Engineering from University of Wisconsin-Milwaukee. He has published journal and conference papers. Dr Ali has completed research projects with Chrysler, Ford, New Center Stamping, Whelan Co., Progressive Metal Manufacturing Company, Whitlam Label Company, DTE Energy, Delphi Automotive System, GE Medical Systems, Harley-Davidson Motor Company, International Truck and Engine Corporation (ITEC), National/Panasonic Electronics, and Rockwell Automation. He is a co-founder of International Conference of Industrial Engineering and Operations Management (IEOM) and serving as an executive director of IEOM Society International. His research interests include manufacturing, simulation, optimization, reliability, scheduling, manufacturing, and lean. He is member of ASEE, IEOM, IISE, INFORMS, SME and IEEE.

Lean Six Sigma Green Belt Certification Workshop

LAWRENCE TECH, Southfield, Michigan

September 24-25, 2016 (Saturday & Sunday), Time: 8:00 pm – 5:00 pm

DAY 1: Saturday, September 24, 2016

4 hours – Lean Six Sigma Overview and Lean Awareness

1 hour lunch

Day 1: 2 hours – Define and Measure

Day 1: 2 hours – Analyze

DAY 2: Sunday, September 25, 2016

Day 2: 1.5 hours – Improve

Day 2: 1.5 hours – Control

Day 2: 2 hours – How to do lean six sigma project in industrial applications

Day 2: 2 hours Project Closure and Wrap-up

Workshop Materials:

- Six Sigma and Lean Green Belt training binder with all workshop materials
- The Lean Six Sigma Pocket Book
- Six Sigma project management tool – Structured Project Guide
- Project case studies
- Access to post workshop online (Moodle) training materials – 3 months free access

Workshop notables:

- Participants will work in a workshop format with data collected in a simulated project in the workshop
- Participants will learn to use the Structured project Guide and get a copy of same to use in their projects
- Participants will be given a Six Sigma Yellow Belt certificate with a provisional green belt certificate on completion of class
- Participants will be given a Six Sigma Green Belt on completion of a project signed off by their sponsor



SPEAKER

Jayant Trewin, ASQ Fellow, Ph.D.
Lean Six Sigma Master black belt
Performance Coach and Advisor

Jayant Trewin is an Industrial Engineer specializing in Quality Systems design, development, implementation and management. Jayant has accumulated over a decade of experience working in healthcare organizations such as Spectrum Health Medical Group, Beaumont Hospitals, and service organizations such as Thomson Reuters and Lason Systems, where he built healthcare and service delivery process improvement programs based on lean, Six Sigma and PDCA concepts. He also worked for two years at Thomson Reuters working as Director of Quality Assurance, IP and Science division, managing the quality of acquisition of data for scientific research. Jayant has been teaching quality engineering since 1997 in his roles as Adjunct Professor at Lawrence Technological University, Wayne State University and Oakland University, all in Michigan, in addition to giving quality engineering talks, seminars and workshops at numerous national and international conferences. Jayant has also served as a

Research Analyst for Wayne State University, Center for Urban Studies and Office of Strategic Planning from 1993 to 1999. Jayant has written two books, Practical Lean Sigma for Healthcare and Multivariate Statistical Methods in Quality Engineering and he has been published in international journals. Jayant is a Fellow of ASQ and he holds a Doctorate degree in Industrial Engineering from the College of Engineering, Wayne State University, Detroit, MI, USA. He earned his MBA in Information Systems at Wayne State University and his Bachelor of Engineering degree from Madras University, India.



IEOM Washington DC Conference September 25-27, 2018

Venue: University of the District of Columbia (UDC) Campus,
Washington, DC, USA

Conference Chair:

Dr. Devdas Shetty, Dean, School of Engineering and Applied Sciences, UDC

Monte Carlo Simulation & Optimization for Robust Design with DiscoverSim

September 23, 2016 (Friday)

Time: 8:00 am – 5:00 pm

This one day workshop will introduce participants to Monte Carlo simulation and optimization for robust design and Design For Six Sigma (DFSS). The Excel add-in DiscoverSim Version 2 by SigmaXL will be introduced and used throughout the workshop with case studies. A complimentary license of DiscoverSim (value \$995) will be given to each participant!

Workshop Outline:

- Introduction to Monte Carlo Simulation
- Introduction to Optimization for Robust Design and Design for Six Sigma (DFSS)
- Navigating DiscoverSim software
- Distribution Fitting
- Specify Input Correlations
- Simulation Settings
- Case Study 1: Profit Simulation
- Optimization Settings
- Case Study 2: Magazine Production Optimization
- Case Study 3: Optimum Project Selection
- Case Study 4: Variation Reduction of Catapult
- Case Study 5: Robust Design of Shut-Off Valve Spring Force
- Multiple Response Optimization (MRO)
- Case Study 6 (time permitting): MRO and Tolerance Design of Low Pass RC Filter

Instructor:



John Noguera, P. Eng., CTO & Co-founder SigmaXL Inc. John Noguera is Co-founder and Chief Technology Officer of SigmaXL, Inc., a leading provider of user-friendly Excel add-ins for statistical and graphical analysis. John leads the development of SigmaXL and DiscoverSim with a passion for ease-of-use, practical & powerful features, and statistical accuracy. John has also specialized in teaching statistical methods and consulting in the implementation of Six Sigma Quality – with a focus on practical application with return on investment, in manufacturing, service and transactional areas. Since 1989, he has provided consulting and training services to more than 5000 black belts, green belts, managers, engineers, and business professionals in North America, Central America, Australia, Asia, Middle East and Europe. John is a certified Six Sigma master black belt and was an instructor at Motorola University. He co-developed Motorola's External Six Sigma Green Belt program which utilized the SigmaXL software tool. John was fortunate to have started his involvement with Six Sigma being mentored by the originator of Six Sigma, Bill Smith. John has a B.A.Sc. in Electrical Engineering (1981) from the University of Waterloo. He is a member of the Professional Engineers of Ontario (PEO), American Statistical Association (ASA), INFORMS and Senior Member of the American Society for Quality (ASQ). He has authored conference papers on Statistical Process Control and Six-Sigma Quality and has been a guest lecturer at the University of Notre Dame. He is a contributing author in the Encyclopedia of Statistics in Quality and Reliability (Wiley).

IEOM Competitions

Undergraduate Student Paper Competition sponsored by Siemens

Graduate Student Paper Competition sponsored by Eaton

SIEMENS PLM Student Design Competition

High School STEM Project Presentation Competition

Undergraduate Research Presentation Competition

Senior Capstone Design Project Poster Competition

Doctoral Dissertation Research Presentation Competition

Poster Presentation Competition

Simulation Competition

Computer-Aided Engineering (CAE) Workshop using Hypermesh

September 24, 2016 (Saturday), Time: 9:00 am – 5:00 pm



DM Noor Ruhul Alam

Design Release Engineer
General Motor Technical Center
Warren, Michigan

This workshop will cover Finite Element Analysis (FEA) using Hypermesh as pre and post processor. Topics are the following:

- Basic understanding of liner and non-liner finite element analysis
- Types of element used
- Basic frequency analysis
- Case study of a linear static analysis using OPTISTRUCT code
- Case study of a frequency analysis using OPTISTRUCT code
- Case study of a dynamic analysis using LS DYNA

Biography: Mr. Noor Ruhul Alam is a design release engineer at General Motors. He is currently working with Headliners and Garnish Product. Previously Mr. Alam worked as Issue Resolution Team Co-chairman (Interior) during 2013 –2015 at Arlington plant, Texas and Detroit Hamtramck Plant of General Motors. He was a CAE Engineer at General Motors during 2000 – 2013. He has worked on Computer Aided engineering (System level and Full vehicle level) for best practice and government required criteria in terms of stiffness and safety regulation for multiple SMT like Closure, Exterior and Interior. Mr. Alam has used many CAE tools for analysis including: HYPERMESH Pre and Post Processor, HYPERVIEW (post processor), HYPERGRAPH, LS-DYNA Pre and Post Processor, Primer Pre Processor, Solver code: NASTRAN, ABAQUS, OPTISTRUCT, LS-DYNA, UNIGRAPHICS, and Vis Mock Up. He has received Master of Engineering in Mechanical Engineering from University of South Alabama, Mobile, USA and BS in mechanical engineering from Khulna University of Engineering and Technology (KUET), Bangladesh.

Entrepreneurial Mindset: Opportunity Recognition & Value Proposition

September 25, 2016 (Thursday), 2:00 pm – 6:00 pm

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



Professor Donald M. Reimer

Adjunct faculty – A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University, Southfield, Michigan, USA

Donald M. Reimer is an adjunct faculty at the A. Leon Linton Department of Mechanical Engineering 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.

Date: Thursday, October 20, 2016
Time: Snacks/Networking: 5:30 PM; Program: 6:00 – 7:15 PM
Location: Lawrence Technological University
Science Building, Science & Engineering Auditorium, Room S100
21000 W. 10 Mile Rd., Southfield, MI 48075

“Re-Think Continuous Improvement Curriculum: One Day Training”



Larry Frydrych

Larry Frydrych, a Lean Continuous Improvement Trainer and Coach for Health Alliance Plan (HAP), will provide insights into HAP's Lean journey. Larry will share how HAP created and implemented an engaging and educational curriculum to train the entire workforce by using a one day, Lean Continuous Improvement class over a five year period.

In 2014, HAP chose a corporate paradigm shift for utilizing Lean continuous improvement. With the acquisition of HealthPlus and Midwest, the company grew to over 1,000 employees. HAP's goal was to equally train the entire workforce (everyone from the front-line supervisors up through the corporate leadership). In this case study, Larry will talk about how training was setup, trainees and trainers were selected, and share the lessons learned.

Larry Frydrych has successfully worked with every layer of management, including the senior level, in process improvement, implementing and utilizing the Huddle System, Rapid Redesigns, Kaizen, Value Stream Mapping, A3 and other lean tools. His business experience includes sixteen years in the healthcare industry, mostly as a Project Manager, and ten years of international experience in the commercial construction and code requirements industry. Larry holds a Bachelor of Science in Economics and is trained in MLC Bronze and Six Sigma Green Belt. After successfully passing his MLC Bronze test, he began studying for his MLC Silver certification.

Directions: Lawrence Technological University is located on 10 Mile Road, west of Evergreen Road. Easily accessible from I-696 by taking M-10 (Northwestern Highway/Lodge Freeway) exiting at Ten Mile Road/Evergreen Road. Turn west onto Ten Mile Road. The campus entrance is on the right. Signs will help direct you to the Science Building, Parking Lot “D”. Public parking is available in the campus lots.

Admission is FREE!

RSVP to: tinyurl.com/hkq98t6
for food count by October 17th!!

Questions: Contact Steve Sibrel 248-760-8252

www.asqdetroit.org

International Journal of Industrial Engineering and Operations Management (IJIEOM)

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

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

IJIEOM is a flagship journal of IEOM Society International.

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

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IEOM 2015 Dubai Conference Photos (March 3-5, 2015)



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International Symposium on Industrial Engineering and Operations Management
July 25-26, 2017, Bristol, UK

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



www.ieomsociety.org/ieomuk/

Theme: "The Challenge of Industrial Engineering and Operations Management in Building Sustainable Manufacturing and Service Systems"

Organised by: University of Derby and University of the West of England



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

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IEOM Bogota Conference

Industrial Engineering and Operations Management
October 25-26, 2017, Bogota, Colombia

IEOM Society Host University: **The Universidad del Rosario**



International Congress on Industrial Engineering and Operations Management

Bogota, Colombia, October 25-26, 2017

Host: University de Rosario – Bogota

www.ieomsociety.org/ieombogota/

Theme: "The Global Challenges and Opportunities of Supply Chain and Industrial/Production Engineering"

Organized by: University de Rosario, IEOM Society of Colombia and IEOM Society International



Conference Chair:

Sandra Milena Chacon Sanchez

Directora del Programa de Administración de Empresas

Directora programa de Administración en Logística y producción

Universidad del Rosario

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